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NAVAL OCEANOGRAPHY COMMAND DETACHMENT ASHEVILLE NC  
U.S. NAVY AND MARINE CORPS METEOROLOGICAL STATION CLIMATIC SUMM--ETC(U)  
OCT 79

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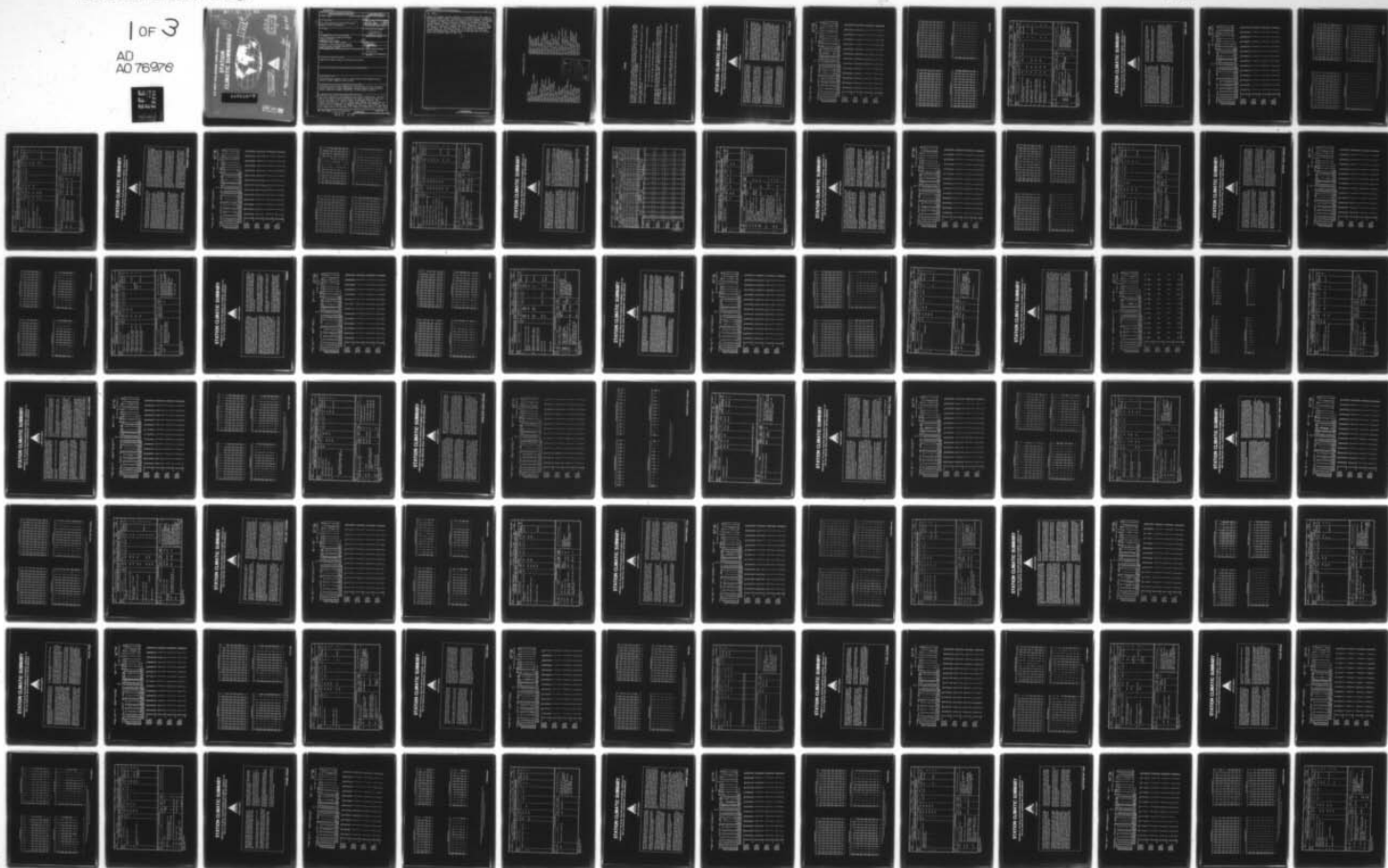
U.S. NAVY AND MARINE CORPS METEOROLOGICAL STATION CLIMATIC SUMM--ETC(U)

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U.S. NAVY AND MARINE CORPS METEOROLOGICAL

# STATION CLIMATIC SUMMARIES

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19. KEY WORDS (Continue on reverse side if necessary and identify by block number)  Climatology, surface wind, temperature, precipitation, ceiling, visibility, relative humidity, extreme temperatures, heating degrees, cooling degrees, weather conditions, monthly climatology, 61 naval shore facilities.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  This report consists of four pages for each station listed below. The first page is a climatic narrative followed by two pages of tabular climatic data and the last page is the station history of instrument location. The stations included are: Adak, Ak; Agana, Guam; Alameda, CA; Andrews AFB, MD; Barbers Point, HI; Beaufort, SC; Bermuda; Brunswick, ME; Camp Pendleton, CA; Cecil Field, FL; Charleston, SC; Chase Field, TX; Cherry Point, NC; China Lake, CA; Corpus Christi, TX; Cubi Point, PI; Dallas, TX; Diego Garcia; El Toro, CA;		

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Fallon, NV; Futenma, Okinawa; Glenview, IL; Guantanamo Bay, Cuba; Imperial Beach, CA; Iwakuni, Japan; Jacksonville, FL; Kadena, Okinawa; Kaneohe Bay, HI; Keflavik, Iceland; Key West, FL; Kingsville, TX; Lakehurst, NJ; Lemoore, CA; Mayport, FL; McMurdo, Antarctica; Memphis, TN; Meridian, MS; Midway Island; Miramar, CA; Moffett Field, CA; New Orleans, LA; New River, NC; Norfolk, VA; Oceana, VA; Patuxent River, MD; Pensacola, FL; Point Mugu, CA; Quantico, VA; Roosevelt Roads, PR; Rota, Spain; San Clemente Island, CA; San Diego, CA; San Nicolas Island, CA; Santa Ana, CA; Souda Bay, Crete; South Weymouth, MA; Whidbey Island, WA; Whiting Field, FL; Willow Grove, PA; Yokosuka, Japan and Yuma, AZ.

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# ALPHABETICAL STATION LIST

Adak, Alaska  
 Agana, Guam  
 Alameda, California  
 Andrews Air Force Base, Maryland  
 Barbers Point, Hawaii  
 Beaufort, South Carolina  
 Bermuda  
 Brunswick, Maine  
 Camp Pendleton, California  
 Cecil Field, Florida  
 Charleston, South Carolina  
 Chase Field, Texas  
 Cherry Point, North Carolina  
 China Lake, California  
 Corpus Christi, Texas  
 Cubi Point, Philippines  
 Dallas, Texas  
 Diego Garcia  
 El Toro, California  
 Fallon, Nevada  
 Futenma, Okinawa  
 Glenview, Illinois  
 Guantanamo Bay, Cuba  
 Imperial Beach, California  
 Iwakuni, Japan  
 Jacksonville, Florida  
 Kadena, Okinawa  
 Kaneohe Bay, Hawaii  
 Keflavik, Iceland  
 Key West, Florida  
 Kingsville, Texas

Lakehurst, New Jersey  
 Lemore, California  
 Mayport, Florida  
 McMurdo, Antarctica  
 Memphis, Tennessee  
 Meridian, Mississippi  
 Midway Island  
 Miramar, California  
 Moffett Field, California  
 New Orleans, Louisiana  
 New River, North Carolina  
 Norfolk, Virginia  
 Oceana, Virginia  
 Patuxent River, Maryland  
 Pensacola, Florida  
 Point Mugu, California  
 Quantico, Virginia  
 Roosevelt Roads, Puerto Rico  
 Rota, Spain  
 San Clemente Island, California  
 San Diego, California  
 San Nicolas Island, California  
 Santa Ana, California  
 Souda Bay, Crete  
 South Weymouth, Massachusetts  
 Whidbey Island, Washington  
 Whiting Field, Florida  
 Willow Grove, Pennsylvania  
 Yokosuka, Japan  
 Yuma, Arizona

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## FOREWORD

The Station Climatic Summaries included in this publication generally consist of four pages per station: a narrative, a station history, and two pages of tabular material. Occasional exceptions to this practice may be noted where existing summaries, lack of input data, etc., required some modification of this arrangement.

The annual mean number of days with fog will be truncated in the high order position if the value is greater than 99.

The following indicators are used in the sequential tables of temperature and precipitation:

"M": 10 or more days record missing (no mean)

"P": less than 10 days record missing (partial mean)

Heating degree day and cooling degree day data are shown only for months with temperature data for each day of the month; hence, monthly temperatures may be marked "P", with an "M" for the degree days for the same year-month. Annual values are not computed for months with "M" or "P" values.

The degree day total for the month is the sum of the departures of the daily mean temperatures from the base of 65° F.

The appearance of a flag (#) in the snowfall columns (MIN, MAX, MAX 24 HR) when the minimum temperature does not support snowfall, indicates the occurrence of hail.

The station history information describes the Navy installation listed at the top of the page.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Adak Island is part of the Andreanof group of Aleutians. The island is about 30 miles long and 20 miles wide at its widest part. The nearest continental land masses are mainland Alaska approximately 700 miles to the northeast, and eastern Siberia approximately 700 miles to the northwest.

Adak has a very rugged, mountainous terrain composed of volcanic matter. It is treeless with tundra covered lowlands and numerous small lakes. The Naval Station lies on the northeast side of the island with runways 17 feet above mean sea level. The adjacent open waters of Kuluk Bay extend eastward into the Bering Sea.

Storms occur in any season but they are most numerous and severe during the winter. Intense winter cyclonic storms produce gusty winds, rain, snow, or rain and snow mixed. An extensive area of advection fog forms over the North Pacific and Bering Sea and drifts over the island frequently during the summer season, but rarely bringing the visibility below GCA minimums.

The Kuroshio, similar to the Gulf Stream off the east coast of the United States, is a warm current flowing northeasterly. The Kuroshio extension flows eastward south of the Aleutian chain. Sea temperatures in the Adak area are modified significantly by the warm Kuroshio extension. Sea surface temperatures near

Adak range from the mid to high 30's in January to March and to near 50 degrees F. in August.

A rather mild climate, for this northern latitude, is encountered due to these warm sea temperatures surrounding Adak and the Aleutians. The highest recorded temperature for Adak is 75 degrees F. (August 1956) while the lowest recorded temperature was 3 above zero (January 1963 and February 1964). The frequent occurrence of high winds with temperatures below 40 degrees F. in winter require that wind chill be considered.

The effect of the mountainous terrain of Adak on surface winds is significant, and is noticed particularly as a blocking or funneling effect. The low neck of land to the west of the station, and the pass to the north of the station have a definite funneling effect on the surface winds. Winds from the mountainous southern end of the island tend to have a sizeable increase in velocity. During strong northwesterly flow, the winds become extremely gusty. This is particularly true in fall and winter when a northwesterly flow is usually associated with squally weather. The prevailing west wind at Adak is caused by the location of the Aleutian low in winter and the North Pacific high in summer.

Nearly all forms of precipitation occur on Adak but the pre-dominate types are snow and rain.

ADAK, ALASKA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: ADAK, ALASKA  
LOCATION: N 51 53 W 176 39

PERIOD: JAN 50-DEC 77  
ELEV: 17

STN LTR: 1 PAKK  
WMO # 1 25704  
WMO # 1 70454

TEMPERATURE		DEG. F		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUMIDITY		WINDS		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS		SEA		STATE		DEPT		WIND		SPEED		PRESS	
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## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1950	2.85	2.67	3.48	2.89	2.21	2.09	2.44	0.26	0.02	2.02	2.66	1.17	21.44
1951	2.85	2.67	3.48	2.89	2.21	2.09	2.44	0.26	0.02	2.02	2.66	1.17	21.44
1952	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1953	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1954	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1955	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1956	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1957	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1958	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1959	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1960	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1961	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1962	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1963	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1964	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1965	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1966	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1967	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1968	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1969	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1970	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1971	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1972	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1973	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1974	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1975	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1976	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1977	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1978	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54
1979	3.23	2.93	3.75	3.16	2.48	2.36	2.71	0.35	0.15	2.35	3.00	1.32	24.54

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct.	Nov.	Dec.	Total
1910													
1911													
1912													
1913													
1914													
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1966													
1967													
1968													
1969													
1970													

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1950	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1951	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1952	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1953	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1954	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1955	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1956	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1957	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1958	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1959	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1960	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1961	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1962	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1963	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1964	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1965	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1966	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1967	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1968	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1969	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1970	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1971	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1972	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1973	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1974	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1975	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1976	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1977	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1978	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1979	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
1980	33.6	32.4	30.9	29.7	28.2	26.4	25.0	24.2	23.8	23.2	23.0	23.7	23.7
MEAN	33.6	32.7	30.6	29.2	26.7	24.6	23.1	21.2	20.0	20.6	21.2	20.6	20.6

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1919-20	449	313	240	709	11	600	820	877	943	842	790	611	8
20-21	449	420	228	672	100	786	786	786	921	829	786	391	146
21-22	345	420	228	672	743	1071	889	889	941	880	782	253	1776
22-23	439	348	476	719	1032	999	999	999	919	820	761	444	3666
23-24	329	432	459	909	959	914	1051	837	917	826	810	457	9045
24-25	318	328	318	790	969	884	884	885	851	847	755	375	3754
25-26	318	328	318	790	969	884	884	885	851	847	755	375	3754
26-27	318	328	318	790	969	884	884	885	851	847	755	375	3754
27-28	318	328	318	790	969	884	884	885	851	847	755	375	3754
28-29	318	328	318	790	969	884	884	885	851	847	755	375	3754
29-30	534	444	454	1044	999	1022	999	899	999	919	739	449	3992
30-31	318	328	318	790	969	884	884	885	851	847	755	375	3754
31-32	318	328	318	790	969	884	884	885	851	847	755	375	3754
32-33	318	328	318	790	969	884	884	885	851	847	755	375	3754
33-34	318	328	318	790	969	884	884	885	851	847	755	375	3754
34-35	318	328	318	790	969	884	884	885	851	847	755	375	3754
35-36	318	328	318	790	969	884	884	885	851	847	755	375	3754
36-37	318	328	318	790	969	884	884	885	851	847	755	375	3754
37-38	318	328	318	790	969	884	884	885	851	847	755	375	3754
38-39	318	328	318	790	969	884	884	885	851	847	755	375	3754
39-40	318	328	318	790	969	884	884	885	851	847	755	375	3754
40-41	474	444	454	1044	999	1022	999	899	999	919	739	449	3992
41-42	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
42-43	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
43-44	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
44-45	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
45-46	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
46-47	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
47-48	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
48-49	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
49-50	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
50-51	444	444	454	1044	999	1022	999	899	999	919	739	449	3992
51-52	444	444	454	1044	999	1022	999	899	999	919	739	449	3992

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV (FT)	CALL SIGN	WMO NUMBER
25704	Adak, Alaska	51° 53' N	176° 39' W	17	PADK	70454

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	In Weather Office located on main deck Birchwood hangar	NS		1959	51° 53' N	176° 39' W	14	mercurial	24
2.	In Weather Office located first deck of new operations building	NS	1959		"	"	16	"	24
1a.	In Weather Office, main deck Birchwood hangar	NS	1952	1959	"	"	18	aneroid	24
2a.	In Weather Office located first deck of new operations building	NS	1959	1961	"	"	"	"	24
3a.	AN/GMQ-14A cabinet, NWSED Office Ops Building	NS	1961	1968	"	"	18	"	24
4a.	Inboard bulkhead, NWSED Office Ops Building	NS	1968		"	"	18	"	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	MT ABOVE GROUND	
1.		1000' NNW of hangar & 25'E of air control tower	Selsyn		25'	1. Barograph (ML-3A)
2.	1957	On 30' mast atop Birchwood hangar	AN/UMQ-54		75'	2. Semi-Auto Met station (AN/GMQ-14B)
3.	1959	Conversion of equipment	AN/UMQ-50	RD-108	75'	3. Ceiling light (ML-121)
4.	1960	Transmitter on roof of new Ops Bldg same	"	RD-108B		4. Cloud height set (AN/GMQ-13B)
5.	1962	Located 500' on a bearing of 115° true from the intersection of runways 23-05 & 36-18			15'	5. Theodolite (ML-247)
6.						6. Transmissometer (AN/GMQ-10C)
						7. Rawinsonde set (AN/GMD-1B)
						8. APT (AN/GRK-7)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Station at Agana, Guam, is located 269 feet above mean sea level on the northern plateau of Guam. Guam is the largest and southernmost of the Mariana Islands. The island is approximately 28 miles long, 4 to 8 miles wide, and is oriented north northeast-south southwest. Barrigada Mountain is located three miles east of the station and Mount Tenjo, with an elevation of 1022 feet, is located 5 1/2 miles west southwest. The trade winds reach the station after rising sharply up the cliffs on the eastern side of the island and flowing on an easy downslope grade across the surface of the northern plateau.

The climate of Guam is almost uniformly warm and humid throughout the year. Afternoon temperatures are typically in the middle to upper eighties and night time temperatures fall to the middle or low seventies. Though temperature and humidity vary only slightly throughout the year, rainfall and wind conditions vary markedly, and it is these latter variations that really define the seasons.

There are two primary seasons on Guam. The primary seasons

are the four-month dry season which extends from mid-January through mid-May, and the four-month rainy season which extends from mid-July to mid-November.

Flying weather is generally excellent with Visual Flight Rules (VFR) prevailing approximately 99 percent of the time.

The predominant winds on Guam throughout the year are the trade winds which blow from the east or northeast. During the dry season, the trades are strongest. In the rainy season, there is often a breakdown of the trades, and calm or light and variable winds are experienced. Occasionally, typhoons pass over or near the island and these bring not only copious rainfall, but also violent winds which may cause a surge of water onto low lying coastal areas. The chances of having one or more typhoons pass close to Guam in any particular year is about 1 in 3. The chances of having a typhoon move directly across Guam, however, is only about 1 in 7 years.

AGANA, GUAM



STN LTRS: PGUM  
WBAN # : 41406  
WMO # : 91212

YS OCCURRENCE OF

Y	PQ	DEC	F	AND	MIN
0	7	1	0	0	0
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0	0	0	0	0
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0	0	0
17	0	0	0	0	0
18	0	0	0	0	0
19	0	0	0	0	0
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0	0
23	0	0	0	0	0
24	0	0	0	0	0
25	0	0	0	0	0
26	0	0	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0	0	0	0	0
31	0	0	0	0	0

[illegible]



[illegible][illegible]

Partial monthly values were not included in means.

[illegible]

Year	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
Year	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

[illegible]

THESE



STATION NO. ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT.)	CALL SIGN	WMO NUMBER
41406	Agana, Guam	13° 30' N	144° 48' E	269	PGUM	91212

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	In Weather Central spaces	FWC	Installed	1958	13° 30' N	144° 48' E	244	Fortin	24
2.	*Weather service office, first deck Ops Building	NAS	1958	1961	"	"	254.7	"	24
3.	New barometer installed north wall, weather service spaces	NAS	1961	1966	"	"	*** 254.7	"	24
4.	Lowered from previous position	NAS	1966		"	"	253.8	"	24
1a.	GMQ 14B console	NAS	1962		"	"	257	Aneroid	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	On 18 foot mast atop platform located on terminal building roof	3 cup	unknown	63'	1. Barograph (Aero, 1932 USN) 2. Semi-auto Met station (AN/GMQ-14B) 3. Ceiling light (ML-121-H) * NAS Agana, Guam was activated on 1 April 1958. ** Surveyed by Public Works surveyor 2 Dec 1959 and found to be accurate *** Raised an additional 12 feet to provide for better exposure.
2.	1959	Between runway 6L and 6R and approximately in the center	AN/UMQ-5	RD-108	*** 14'	
3.	1976	Between runway 6L and 6R and approximately in the center	AN/UMQ-5	RD-108	26'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Alameda is located on the eastern side of San Francisco Bay on the western end of the Alameda Island. The city of San Francisco lies four miles directly across the bay.

Alameda's climate could be best described as Mediterranean, characterized by three dominant features: mild temperatures, rainy winters, and dry summers with a great deal of stratus cloudiness. The general circulation features cool, moist maritime air flowing on shore at low levels from the prevailing westerly winds which emanate from the eastern periphery of the North Pacific anticyclone. Except under unusual circumstances this marine influence results in both diurnal and seasonal temperature variances which are considerably less than would be expected at an inland station in this latitude.

Topographic features are quite influential on San Francisco Bay area weather, since the bay area is dominated by the flow of maritime air. The coastal mountains serve to severely modify, or restrict entirely, the intrusion of this air into the interior valleys, and similarly, these same ranges impede or inhibit the flow of continental air into the bay area. As a result, those areas east of the coastal mountains experience warmer days, cooler nights and fog-free summers.

Traditionally, the winter or "rainy" season begins in November and continues through March. Over 80% of the average rainfall

occurs during this period. The transition from the winter rains to the dry summer occurs during the months of April and May. During late May, the incidence of coastal low stratus increases signaling the onset of the summer dry season. The summer dry season occurs during the period of June through September. It is characterized by the formation of stratus cloudiness during the early evening, which usually dissipates by mid-morning, with clear skies during the afternoon. October and early November constitute the transition period from the summer dry season to the winter wet season. Warm days, cooler nights make this period a most pleasant season.

The factors affecting the visibility at Alameda were at one time almost totally confined to fog, common to the cooler season; however, air pollution is fast becoming a major problem in the bay area. Heavy air pollution (smog) will occasionally reduce visibilities below VFR minimums, particularly during the summer season when the easterly gradient opposes the normal sea breeze.

Though thunderstorms are not common in the bay region, they have occurred in all seasons. Although temperatures in excess of 90 degrees F. have been observed during each of the months from April through October, summer temperatures in excess of 80 degrees F. are an exception, and winter temperatures below 34 degrees F. are in the same category.

ALAMEDA, CALIFORNIA



STN LTRSI KNGZ  
WBAN # 1 23239  
WHD # 1 74506

FLYING WEA & HRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	YR
CEILING	01	32	29	30	27	36	39	51	62	38	29	27	33	33	33
LESS 1000	04	35	15	34	33	44	47	61	62	47	35	30	36	42	33
PT AND/OR	07	40	37	37	27	43	51	63	68	54	40	35	41	46	33
VISIBILITY	10	37	36	33	29	33	33	37	41	34	30	32	37	34	33
LESS 5 MI	13	32	30	27	21	18	13	9	11	11	16	24	29	33	33
	16	28	24	23	17	14	11	6	9	17	13	20	25	20	33
	19	25	23	23	19	21	19	20	26	15	15	20	23	21	33
	22	36	25	24	21	28	28	37	40	25	23	22	27	27	33
ALL HRS	32	30	29	26	26	30	30	36	39	29	25	26	32	30	33
CEILING	01	8	10	6	6	13	21	37	39	23	14	9	11	17	33
LESS 1000	04	11	11	7	7	16	23	45	47	30	17	12	13	20	33
PT AND/OR	07	15	15	10	9	16	23	45	49	31	22	16	16	22	33
VISIBILITY	10	14	13	6	5	6	7	15	18	13	12	12	16	11	33
LESS 3 MI	13	17	6	4	3	2	2	2	2	2	3	6	8	4	33
	16	6	5	4	3	3	3	2	18	2	4	4	6	4	33
	19	5	4	6	4	9	9	14	20	10	6	4	6	8	33
	22	9	5	5	5	12	15	30	32	17	12	6	7	13	33
ALL HRS	9	9	6	5	5	10	13	24	26	16	11	6	10	12	33
CEILING	01	5	5	2	2	3	4	10	8	5	4	5	6	5	33
LESS 500	04	7	7	4	3	3	5	11	10	7	5	7	7	6	33
PT AND/OR	07	10	10	3	3	3	3	8	9	6	6	6	9	7	33
VISIBILITY	10	8	8	3	3	1	1	1	1	1	2	2	2	4	33
LESS 1 MI	13	3	3	3	3	2	2	2	1	1	2	2	2	2	33
	16	3	3	3	3	2	2	2	1	1	2	2	2	2	33
	19	3	2	3	2	2	2	6	2	1	2	2	2	2	33
	22	3	2	3	2	2	3	5	5	3	4	3	4	3	33
ALL HRS	5	5	3	3	2	2	3	5	5	3	4	3	4	4	33
CEILING	01	3	4	1	1	1	1	1	1	1	2	2	3	2	33
LESS 100	04	5	7	2	2	1	1	0	0	1	2	4	4	3	33
PT AND/OR	07	6	7	2	2	1	1	1	1	1	2	5	5	3	33
VISIBILITY	10	4	3	3	3	2	1	2	1	1	2	3	4	2	



# MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1946	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1947	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1948	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1949	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1950	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1951	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1952	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1953	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1954	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1955	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1956	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1957	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1958	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1959	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1960	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1961	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1962	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1963	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1964	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1965	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1966	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1967	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1968	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1969	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1970	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1971	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1972	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1973	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1974	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1975	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1976	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1977	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1978	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1979	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
1980	50.1	51.1	52.7	54.7	56.7	58.7	60.1	61.1	61.5	62.5	63.7	64.7	58.2
MEAN	50.6	51.6	53.2	55.1	57.5	59.7	62.7	65.2	67.9	70.4	72.9	75.2	65.5

# HEATING DEGREE DAYS

Season	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
44-45	40	40	40	40	40	40	40	40	40	40	40	40	40
45-46	40	40	40	40	40	40	40	40	40	40	40	40	40
46-47	40	40	40	40	40	40	40	40	40	40	40	40	40
47-48	40	40	40	40	40	40	40	40	40	40	40	40	40
48-49	40	40	40	40	40	40	40	40	40	40	40	40	40
49-50	40	40	40	40	40	40	40	40	40	40	40	40	40
50-51	40	40	40	40	40	40	40	40	40	40	40	40	40
51-52	40	40	40	40	40	40	40	40	40	40	40	40	40
52-53	40	40	40	40	40	40	40	40	40	40	40	40	40
53-54	40	40	40	40	40	40	40	40	40	40	40	40	40
54-55	40	40	40	40	40	40	40	40	40	40	40	40	40
55-56	40	40	40	40	40	40	40	40	40	40	40	40	40
56-57	40	40	40	40	40	40	40	40	40	40	40	40	40
57-58	40	40	40	40	40	40	40	40	40	40	40	40	40
58-59	40	40	40	40	40	40	40	40	40	40	40	40	40
59-60	40	40	40	40	40	40	40	40	40	40	40	40	40
60-61	40	40	40	40	40	40	40	40	40	40	40	40	40
61-62	40	40	40	40	40	40	40	40	40	40	40	40	40
62-63	40	40	40	40	40	40	40	40	40	40	40	40	40
63-64	40	40	40	40	40	40	40	40	40	40	40	40	40
64-65	40	40	40	40	40	40	40	40	40	40	40	40	40
65-66	40	40	40	40	40	40	40	40	40	40	40	40	40
66-67	40	40	40	40	40	40	40	40	40	40	40	40	40
67-68	40	40	40	40	40	40	40	40	40	40	40	40	40
68-69	40	40	40	40	40	40	40	40	40	40	40	40	40
69-70	40	40	40	40	40	40	40	40	40	40	40	40	40
70-71	40	40	40	40	40	40	40	40	40	40	40	40	40
71-72	40	40	40	40	40	40	40	40	40	40	40	40	40
72-73	40	40	40	40	40	40	40	40	40	40	40	40	40
73-74	40	40	40	40	40	40	40	40	40	40	40	40	40
74-75	40	40	40	40	40	40	40	40	40	40	40	40	40
75-76	40	40	40	40	40	40	40	40	40	40	40	40	40
76-77	40	40	40	40	40	40	40	40	40	40	40	40	40
77-78	40	40	40	40	40	40	40	40	40	40	40	40	40
MEAN	40	40	40	40	40	40	40	40	40	40	40	40	40

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing. Partial monthly values were not included in mean.

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1946	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1947	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1948	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1949	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1950	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1951	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1952	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1953	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1954	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1955	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1956	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1957	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1958	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1959	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1960	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1961	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1962	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1963	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1964	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1965	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1966	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1967	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1968	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1969	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1970	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
1971	1.0	1.0	1.0	1.0	1.0								



STATION NO OR SUMMARY		STATION NAME		LONGITUDE		LATITUDE		STATION ELEV. (FT)		CALL SIGN		WIND NUMBER	
23239		Alameda, California		122°19'W		37°44'N		15		KNGZ		74506	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather office (Ops Bldg)	Navy		1958	37°44'N	122°19'W	28.7	mercurial	24				
2.	Weather office (replacement)(Ops Bldg)	"	1958	1961	"	"	27.5	"	24				
3.	Weather office (Ops Bldg)	"	1961	1966	"	"	30.7	"	24				
4.	Weather Office, Bldg 19, room 205	"	1966	1967	"	"	30.7	"	24				
5.	North bulkhead, OOW office, Bldg 19	"	1967	1974	"	"	32.7	"	24				
1a.	AN/GMQ-14A console, Bldg 19, Rm 205	"	1959	1967	"	"		aneroid					
2a.	AN/GMQ-14A console, OOW office, Bldg 19	"	1967	1977	"	"	30.3		24				
1b.	Weather office, Bldg 19	"	1959		"	"	34.3	aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.		Atop operations control tower	selsyn	triple	1. Barograph
2.	Installed 1953	Atop operations control tower	AN/UMQ-50	RD-108	2. Semi-auto Met. station (AN/GMQ-29)
3.		FLEWEACEN storage spaces	AN/PMQ-3		3. Ceiling light (ML-121)
4.	Relocated 1970	Approach end runway 31	AN/UMQ-50	RD-108B	4. Cloud height set (AN/GMQ-13D)
5.	Relocated 1974	Weather office, Bldg 19	AN/PMQ-3	RD-108B	5. Transmissometer (AN/GMQ-10C)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Weather Service Environmental Detachment Andrews is located on Andrews Air Force Base in Maryland, southeast of Washington, D.C. Observations are taken by Detachment 1, 7th Weather Wing, Base Weather Services Division at Andrews Air Force Base. The observation site is located on the roof of the Base Operations Building, 35 feet above ground level.

The immediate terrain has a local relief of rolling hills and shallow small stream beds. Andrews, with an elevation of 289 feet MSL, is slightly above the average terrain. As a result, fog which affects Andrews usually forms on surrounding lower ground and is advected onto the field. The arrangement of small hills northwest of the end of the runway apparently has a funneling effect on northwest winds, producing unusually strong crosswinds.

The area experiences four seasons but the transition is usually gradual. Precipitation averages out to a little better than 3 inches per month and a snowfall annual average of 20 inches. Temperatures are generally pleasant in the spring and autumn while summers tend to be warm and humid and winters quite variable.

Strong crosswinds, turbulence and icing create significant haz-

ards to flying safety during the winter. In the summer it is air mass thunderstorms and low level haze that pose the greatest threat to flying safety.

The problem of visibility restrictions due to air pollution exists at Andrews year round. Climatologically, the visibility on the base is restricted by haze and/or smoke on an average of 174 days per year. This situation is much more frequent and significant during the summer months with the greater stagnation of major air masses. Often during the months of July through October visibilities are lower in the morning, ranging normally from 1 1/2 to 5 miles in haze and smoke. As the day progresses, surface heating causes enough low-level convection to raise the thickest part of the haze layer to 1,500 - 2,500 feet, thus allowing the visibility to increase at the surface but remain quite low at the mid-level of the haze layer. The top of the haze layer usually ranges from 6,000 - 9,000 feet, indicating a stable subsidence inversion above it.

Approximately 75% of thunderstorms observed here occur during the months of May, June, July and August. July is the peak month with an average of 7 days with thunder.

ANDREWS AIR FORCE BASE, MARYLAND



STATION NAME : ANDREWS AFB MARYLAND (CAMP SPRINGS)  
LOCATION : N38 49 W076 51

PREPARED BY: USAFETAC  
JUN 1974

PERIOD: JUN 43-JUL 72  
ELEV : 289

STN LTRS: KADW  
WBAN NO.: 13705  
WMO NO.: 74594

AWS CLIMATIC BRIEF

M O N T H	TEMPERATURE (°F)				PRECIPITATION (IN)				SNOWFALL (IN)				RELATIVE HUMIDITY (%)				SURFACE WINDS				MEAN NUMBER OF DAYS OCCURRENCE OF:													
	MEAN		EXTREME		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY		MONTHLY											
	DAILY	MON-THLY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MEAN	MAX	PRECIP	SNOWFALL	T	FOG											
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MEAN	MAX	(IN)	(IN)	(H)	(H)											
JAN	42	27	35	77	-3	2.9	6.0	3.3	2.3	6	27	10	71	58	1.3	23	900	NN	8	60	6	10	2	3	1	#	12	0	0	23	#			
FEB	45	28	37	79	3	2.8	6.7	4	1.7	6	22	14	71	56	1.3	24	1050	NNW	9	62	6	9	2	2	1	#	11	0	0	19	0			
MAR	53	35	44	87	12	3.5	6.6	1.1	1.9	4	28	13	21	52	17	30	950	NNW	9	69	6	11	3	2	1	#	11	0	0	13	0			
APR	65	45	55	93	23	3.1	7.2	1.0	2.7	#	3	74	50	25	40	900	NNW	9	62	6	10	2	2	1	#	3	11	#	4	1	0			
MAY	74	54	64	96	33	3.9	11.3	1.0	3.1	#	#	82	53	38	51	750	SSW	7	69	6	11	3	0	0	5	14	1	9	0	0	0			
JUN	82	63	73	100	43	3.7	10.5	-8	3.9	0	0	85	55	54	61	700	SSW	6	53	6	9	2	0	0	6	14	5	19	0	0	0			
JUL	86	68	77	102	54	4.4	14.3	-6	3.0	0	0	86	55	62	65	600	SSW	6	74	6	10	3	0	0	7	14	8	26	0	0	0	0		
AUG	84	66	75	100	48	4.6	14.2	-4	7.1	0	0	87	56	60	64	550	S	5	60	6	9	3	0	0	6	17	7	24	0	0	0	0		
SEP	78	60	69	100	38	3.4	9.0	-6	4.1	0	0	87	52	49	58	650	S	6	59	5	8	2	0	0	2	14	2	13	0	0	0	0		
OCT	68	49	59	92	28	3.0	7.3	#	2.9	#	#	84	55	32	47	750	NNW	6	47	5	7	2	0	0	1	15	#	3	1	0	0	0		
NOV	56	39	48	84	13	3.3	7.1	-2	3.1	1	1	11	77	54	21	36	900	NNW	8	54	5	9	2	1	#	12	0	#	8	0	0	0	0	
DEC	45	29	37	75	7	3.2	6.9	-5	2.3	4	18	10	72	58	14	26	900	NNW	8	57	6	9	2	2	1	#	11	0	#	20	0	0	0	0
ANN	65	47	56	102	-3	41.8	14.3	#	7.1	21	27	27	29	29	29	28	900	NNW	2	24	6	11	2	2	2	2	31	15	23	99	85	#		
REMARKS:																																		
HOURLY OBS: RUSSNO FOR: (A) HURRICANES/TROPICAL STORMS JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC ANN																																		
DAILY OBS: (B) HURRICANES ONLY 60 NM																																		
DAILY OBS: (C) HURRICANES/TROPICAL STORMS 120 NM																																		
NOTE: * DATA NOT AVAILABLE # LESS THAN 0.5 DAY, 0.5 OF 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE																																		

CAV FREQ (%)	HRS LST	JUN 42-JUL 72												PERCENT AS APPLICABLE												ANN	EYR																																																																																																																																																																																																																																																																																																																																																																																																																																
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																																																																																																																																																																																																																																																																																																																																																																																																																																		
00-02	21	20	18	18	18	19	14	11	12	15	17	17	17	18	17	18	17	17	17	17	17	17	17	17	18	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	



STATION NO ON SUMMARY:		STATION NAME:		LATITUDE:		LONGITUDE:		STATION ELEV. (FT)		CALL SIGN:		WMO NUMBER:	
13705		Andrews Air Force Base, Maryland		38°49'N		76°51'W		289		KADW		74594	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			(FT)	TYPE BAROMETER					
1.		AF	1948	1961	38°49'N	76°51'W	283						
2.			1961		"	"	274						
SURFACE WIND EQUIPMENT INFORMATION										REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE			
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND								
1.	1954	1320'N of station on top of a hangar 50' high.	Selsyn			1. Rain gauge (ML-17) 2. Temp sensing equipment (TMQ-11) 3. Transmissometer (GMQ-10) 4. Cloud height Set (GMQ-13)							
2.	1955	7/8 mile from weather station on top of a hangar 60' high.	"	ML-144B									
3.	1956	200' from weather station on top of hangar.	ML-151/ ML-152	"	68'								
4.	1959	1600' from base weather station on top of hangar.	same	"	68'								
5.	1961	450'NW of WOSB		"	Unk								
6.	1962	Additional equipment centered between parallel runways 01 L&R and 19 L&R on southern sector of the base.	GMQ-11	RO2									
7.	1963	Dual wind equipment installation a. Centered between runways 01 L&R and 19 L&R about 300'S of N End. b. Centered between runways 01 L&R and 19 L&R about 300'N of S End. Moved to 1500'S of N End & 1500' N of S End	"	RO 362	13								
8.	1966		"	"	13								
9.	1970	a. 807' from center of and 1414' N of end of runway 01 L. b. 540' from center of and 1203' S of N end of runway 19 R.	GMQ-20	Unk	Unk								
			"	"	"								

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Barbers Point is located on the island of Oahu, the third largest of the Hawaiian Islands. There are two mountain ranges of climatic importance on the island: the Koolau Range, oriented northwest to southeast and the Waianae Range with an average elevation of 3000 feet. A large valley lies between the two mountain ranges, and a relatively flat coastal plain extends along the southern coast. Barbers Point is situated on the leeward side of the island at the southern end of Waianae Range.

Balmy trade wind weather with infrequent light showers is the rule at Barbers Point. The winter season brings periods of wet, inclement weather. The Kona storm, a local wintertime phenomena, replaces the northeast trades with southerly winds and rainy weather.

Flying weather is generally excellent in Hawaii. Visual Flight Rules (VFR) prevail at Barbers Point more than 99 percent of the time. Marginal flying weather usually occurs in association with a Kona or frontal passage. Fog is rarely reported in the islands and has no significant effect on aircraft operations at Barbers Point.

The trade winds are moist when they reach the islands but through orographic lifting the air is relieved of most of its moisture as it passes over the Koolau Range. As a result, the leeward areas of the island have sunny skies and few showers during a

trade regime. Eighty-nine percent of the annual rainfall is recorded during the months from October through April. January is normally the wettest month of the year, averaging 4.4 inches of rain. Though June and July are the driest months of the year, with an average of 0.3 inches, the months of May through September are all nearly as void of precipitation, each averaging less than an inch of rain each year.

Northeasterly trade winds prevail over Oahu during all months of the year. From November through March the trades are occasionally interrupted by moderate to strong southerly winds associated with a Kona or cold frontal passage.

Temperatures at Barbers Point are pleasant throughout the year. The mean annual temperature is 76 degrees, varying from a mean of 72 degrees in winter to 79 degrees during summer. Summertime temperatures rarely exceed 90 degrees. The temperature may dip into the low 50's on a few occasions during the winter each year following a cold frontal passage.

The humidity is rarely uncomfortably high at Barbers Point. The higher humidities are recorded during the cooler part of the year.

Barbers Point is not plagued by destructive weather. Thunderstorms are rare during the summer months and occur only infrequently during the winter.

**BARBERS POINT, HAWAII**



STN LTRS: PHNA  
WBAW # : 22514  
WMD # : 91178

VAP  
PRES

55

OR



## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct.	Nov.	Dec.	Total
1909	227	240	209	225	295	350	377	498	598	337	251	232	3820
1910	227	240	209	225	295	350	377	498	598	337	251	232	3820
1911	246	199	239	260	333	352	401	441	419	407	336	256	3929
1912	222	266	228	248	326	378	403	376	403	369	304	244	3780
1913	250	276	264	274	359	355	413	409	371	400	311	260	4000
1914	218	184	286	298	373	394	436	422	400	347	277	351	3515
1915	228	200	260	280	350	370	400	420	380	300	250	200	3600
1916	228	200	260	280	350	370	400	420	380	300	250	200	3600
1917	255	156	256	321	355	393	419	411	393	310	292	282	3970
1918	255	156	256	321	355	393	419	411	393	310	292	282	3970
1919	255	156	256	321	355	393	419	411	393	310	292	282	3970
1920	255	156	256	321	355	393	419	411	393	310	292	282	3970
1921	255	156	256	321	355	393	419	411	393	310	292	282	3970
1922	255	156	256	321	355	393	419	411	393	310	292	282	3970
1923	255	156	256	321	355	393	419	411	393	310	292	282	3970
1924	255	156	256	321	355	393	419	411	393	310	292	282	3970
1925	255	156	256	321	355	393	419	411	393	310	292	282	3970
1926	255	156	256	321	355	393	419	411	393	310	292	282	3970
1927	255	156	256	321	355	393	419	411	393	310	292	282	3970
1928	255	156	256	321	355	393	419	411	393	310	292	282	3970
1929	255	156	256	321	355	393	419	411	393	310	292	282	3970
1930	255	156	256	321	355	393	419	411	393	310	292	282	3970
1931	255	156	256	321	355	393	419	411	393	310	292	282	3970
1932	255	156	256	321	355	393	419	411	393	310	292	282	3970
1933	255	156	256	321	355	393	419	411	393	310	292	282	3970
1934	255	156	256	321	355	393	419	411	393	310	292	282	3970
1935	255	156	256	321	355	393	419	411	393	310	292	282	3970
1936	255	156	256	321	355	393	419	411	393	310	292	282	3970
1937	255	156	256	321	355	393	419	411	393	310	292	282	3970
1938	255	156	256	321	355	393	419	411	393	310	292	282	3970
1939	255	156	256	321	355	393	419	411	393	310	292	282	3970
1940	255	156	256	321	355	393	419	411	393	310	292	282	3970
1941	255	156	256	321	355	393	419	411	393	310	292	282	3970
1942	255	156	256	321	355	393	419	411	393	310	292	282	3970

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1906	78.29	78.25	78.19	78.25	78.21	78.26	78.49	78.40	78.25	78.15	78.13	78.18	78.25
1907	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1908	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1909	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1910	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1911	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1912	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1913	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1914	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1915	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1916	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1917	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1918	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1919	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1920	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1921	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1922	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1923	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1924	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1925	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1926	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1927	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1928	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1929	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1930	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1931	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1932	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1933	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1934	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1935	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1936	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1937	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1938	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1939	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1940	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1941	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1942	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1943	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1944	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1945	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1946	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1947	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1948	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1949	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1950	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1951	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1952	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1953	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1954	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1955	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1956	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1957	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1958	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1959	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1960	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1961	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1962	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1963	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1964	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1965	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1966	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1967	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1968	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1969	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1970	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1971	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1972	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1973	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1974	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1975	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1976	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1977	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1978	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1979	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1980	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1981	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1982	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1983	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1984	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1985	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1986	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1987	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1988	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1989	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1990	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15
1991	78.11	78.15	78.16	78.16	78.15	78.15	78.16	78.15	78.15	78.15	78.15	78.15	78.15</

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
22514		Barbers Point, Hawaii		21°19'N		158°05'W		33		PHNA		91178	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS. PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Second deck operations building	Navy	1950	1957	21°19'N	158°05'W	50	Mercurial	24				
2.	Relocated within weather services spaces	"	1957	1969	"	"	50	"	24				
3.	Relocated within weather services spaces	"	1969		"	"	50	"	24				
1a.	NWSED spaces, 2nd deck operations building	"	1966		"	"	52	Aneroid					

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	18 ft mast on the operations tower	Selsyn	Double register	84'	* Earlier documentation not available. 1. Barograph (ML-3) 2. Semi-auto Met Sta (AN/GMQ-14B) 3. Ceiling light (ML-121)
2.	1957	Near the intersection of the runways at a distance of 2400 feet SE of operations building	AN/UMQ-5C	RD 108B	12'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The U.S. Marine Corps Air Station, Beaufort, South Carolina is located on the northwest portion of Port Royal Island. The Atlantic Ocean is approximately 20 miles to the northeast of the air station. The field is 35 feet above sea level. Tidal swamp land is abundant throughout the area alternating with scrub pines.

The winters are mild due to the proximity of the ocean and the river surrounding the area. The coolest months are December thru January. Snow flurries have been observed but no measurable amount is likely to fall.

The spring season brings about a spectacular change in the Beaufort weather. While cold blasts of polar air continue to move over the area in March and early April, warm tropical air is beginning to move up from the south. Violent reaction between the two air masses produces thunderstorms and gusty surface winds. By the middle of May the days become sunny and mild as the mean temperature rises.

Summers in Beaufort are hot and humid. Temperatures approach but rarely exceed 100 degrees F. Daily temperatures average about 88 degrees F. for a maximum and 72 degrees F. for a minimum.

The maximum temperatures are greatly affected by a cooling sea-breeze which usually occurs during the early to mid-afternoon hours. Forty-one percent of the total annual rainfall occurs in the summer. Afternoon rain showers and thunderstorms are the primary source of this precipitation. Thunderstorms occur on an average of 33 days during the months of June, July and August.

The changeover from a hot, humid and wet summer to a mild and dry fall season, or Indian Summer, begins during the month of October. April and November are the driest months of the year with an average monthly precipitation ranging between two and three inches. The precipitation comes in the form of light, steady rain falling over an extended period.

The hurricane season for the local area extends from 1 June to 30 November. The months of August, September and October are by far the months of the most frequent occurrence. All major destructive storms move in directly from the Atlantic, but inclement weather can be carried over coastal South Carolina from dissipating cyclones that made landfall over Florida and the Gulf Coast states.

BEAUFORT, SOUTH CAROLINA



PREPARED BY: NWSO ASHEVILLE  
JUNE 1978

STATION NAME: REAFORT, SOUTH CAROLINA  
LOCATION: N32 28 W60 43

PERIOD: OCT 57-OCT 77  
ELEV: 38

STN LTR3: KNBC  
WBAW # 1 93831  
WHD # 1

[illegible]

REMARKS: DATA NOT AVAILABLE. # LESS THAN 0.05, 0.05, OR 0.05 INCL. OR 0.5 PERCENT AS APPLICABLE. THE VALUE LISTED UNDER "PRESS AT 90-998" INDICATES IT IS EXCEEDED ONLY ONCE OF THE YEAR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, YR).

[illegible]



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1897	H	H	H	H	H	H	H	H	H	H	H	H	H
1898	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1899	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1900	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1901	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1902	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1903	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1904	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1905	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1906	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1907	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1908	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1909	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1910	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1911	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1912	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1913	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1914	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1915	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1916	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1917	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1918	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1919	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1920	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1921	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1922	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1923	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1924	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1925	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1926	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3	41.3	41.3	39.8	31.8	40.0
1927	44.6	44.2	44.3	43.9	43.9	43.5	43.5	41.3</					

## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1937	N	N	N	N	N	N	N	N	N	N	N	N	N
1938	2.53	2.53	2.53	2.53	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	40.89
1939	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1940	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	56.75
1941	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1942	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1943	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1944	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1945	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1946	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1947	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1948	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1949	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1950	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1951	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1952	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1953	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1954	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1955	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1956	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1957	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1958	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1959	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1960	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1961	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1962	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1963	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1964	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1965	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1966	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	30.89
1967	2.53	2.53	2.53	2.53	2.5								

## COOLING DEGREE DAYS

Season	Jul *	Aug	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1899-00	M	M	M	M	130	402	622	778	223	68	12	0	1684
1900-01	M	M	M	M	138	444	457	435	530	52	0	0	1804
1901-02	M	M	M	M	144	446	576	301	124	136	5	2	1923
1902-03	M	M	M	M	151	349	573	313	340	134	0	0	1817
1903-04	M	M	M	M	152	322	422	460	235	53	25	0	1850
1904-05	M	M	M	M	152	331	332	424	332	355	44	0	1770
1905-06	M	M	M	M	151	321	426	401	400	238	61	11	2006
1906-07	M	M	M	M	160	370	499	401	447	174	23	21	1939
1907-08	M	M	M	M	158	383	583	383	477	516	65	4	2402
1908-09	M	M	M	M	158	383	583	383	477	516	65	4	2402
1909-10	M	M	M	M	152	358	337	724	318	232	105	10	2397
1910-11	M	M	M	M	154	394	391	494	352	719	103	12	2395
1911-12	M	M	M	M	159	399	208	274	436	512	02	2	1679
1912-13	M	M	M	M	148	348	398	318	341	114	79	3	1605
1913-14	M	M	M	M	148	348	398	318	341	114	79	3	1605
1914-15	M	M	M	M	152	352	392	352	351	236	02	0	1632
1915-16	M	M	M	M	152	352	392	352	351	236	02	0	1632
1916-17	M	M	M	M	152	352	392	352	351	236	02	0	1632
1917-18	M	M	M	M	152	352	392	352	351	236	02	0	1632
1918-19	M	M	M	M	152	352	392	352	351	236	02	0	1632
1919-20	M	M	M	M	152	352	392	352	351	236	02	0	1632
1920-21	M	M	M	M	152	352	392	352	351	236	02	0	1632
1921-22	M	M	M	M	152	352	392	352	351	236	02	0	1632
1922-23	M	M	M	M	152	352	392	352	351	236	02	0	1632
1923-24	M	M	M	M	152	352	392	352	351	236	02	0	1632
1924-25	M	M	M	M	152	352	392	352	351	236	02	0	1632
1925-26	M	M	M	M	152	352	392	352	351	236	02	0	1632
1926-27	M	M	M	M	152	352	392	352	351	236	02	0	1632
1927-28	M	M	M	M	152	352	392	352	351	236	02	0	1632
1928-29	M	M	M	M	152	352	392	352	351	236	02	0	1632
1929-30	M	M	M	M	152	352	392	352	351	236	02	0	1632
1930-31	M	M	M	M	152	352	392	352	351	236	02	0	1632
1931-32	M	M	M	M	152	352	392	352	351	236	02	0	1632
1932-33	M	M	M	M	152	352	392	352	351	236	02	0	1632
1933-34	M	M	M	M	152	352	392	352	351	236	02	0	1632
1934-35	M	M	M	M	152	352	392	352	351	236	02	0	1632
1935-36	M	M	M	M	152	352	392	352	351	236	02	0	1632</

## COOLING DEGREE DAYS

Year	Jan	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1897	0	0	0	102	225	411	550	509	576	65	24	0	2281
1898	0	0	0	115	243	427	514	519	574	109	11	0	2436
1899	1	0	0	115	243	427	514	519	574	109	11	0	2436
1900	0	2	61	40	202	392	531	464	400	68	35	17	2282
1901	0	0	0	78	207	388	544	483	425	193	3	0	2495
1902	11	23	0	102	461	432	479	226	237	119	24	0	2404
1903	0	0	0	115	243	427	514	519	574	109	11	0	2436
1904	0	0	0	115	243	427	514	519	574	109	11	0	2436
1905	0	0	24	118	242	344	484	500	536	151	4	0	2344
1906	0	0	0	115	243	427	514	519	574	109	11	0	2436
1907	2	1	0	61	102	304	457	346	339	108	22	3	2033
1908	0	0	0	115	243	427	514	519	574	109	11	0	2436
1909	0	0	0	115	243	427	514	519	574	109	11	0	2436
1910	0	0	0	115	243	427	514	519	574	109	11	0	2436
1911	0	0	0	115	243	427	514	519	574	109	11	0	2436
1912	0	0	0	115	243	427	514	519	574	109	11	0	2436
1913	0	0	0	115	243	427	514	519	574	109	11	0	2436
1914	0	0	0	115	243	427	514	519	574	109	11	0	2436
1915	0	0	0	115	243	427	514	519	574	109	11	0	2436
1916	0	0	0	115	243	427	514	519	574	109	11	0	2436
1917	0	0	0	115	243	427	514	519	574	109	11	0	2436
1918	0	0	0	115	243	427	514	519	574	109	11	0	2436
1919	0	0	0	115	243	427	514	519	574	109	11	0	2436
1920	0	0	0	115	243	427	514	519	574	109	11	0	2436
1921	0	0	0	115	243	427	514	519	574	109	11	0	2436
1922	0	0	0	115	243	427	514	519	574	109	11	0	2436
1923	0	0	0	115	243	427	514	519	574	109	11	0	2436
1924	0	0	0	115	243	427	514	519	574	109	11	0	2436
1925	0	0	0	115	243	427	514	519	574	109	11	0	2436
1926	0	0	0	115	243	427	514	519	574	109	11	0	2436
1927	0	0	0	115	243	427	514	519	574	109	11	0	2436
1928	0	0	0	115	243	427	514	519	574	109	11	0	2436
1929	0	0	0	115	243	427	514	519	574	109	11	0	2436
1930	0	0	0	115	243	427	514	519	574	109	11	0	2436
1931	0	0	0	115	243	427	514	519	574	109	11	0	2436
1932	0	0	0	115	243	427	514	519	574	109	11	0	2436

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. ON SUMMARY		STATION NAME		LONGITUDE		LATITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER:	
93831		Beaufort, S. C.		80° 43' W		32° 28' N		38		KNBC			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BANG LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	MCAS	1958	1963	32° 28' N	80° 43' W	31.55	Tunnelot	24				
2.	Weather Service office (new barometer installed)	"	1963	1965	"	"	"	"	24				
3.	Weather service office (North bulk-head of room 128, Bldg 600)	"	1965	1968	"	"	"	Fortin	24				
4.	Weather service office (North bulk-head of room 128, Bldg 600)	"	1968		"	"	Ht above Ground 6.0	"	24				
1a.	Weather service office (North bulk-head of room 128, Bldg 600)	"	1960		"	"	8.5	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	Atop operations building	AN/UMQ-5	RD-108	45'	1. Aneroid Barometer (ML-448/UM)
2.	1960	Eleven hundred feet north of Bldg 600, and twelve hundred feet south of the intersection of the runways.	"	"	12'	2. Barograph (ML-3-D) 3. Semi-auto Met Station (AN/GMQ-29) 4. *Cloud height set (AN/GMQ-13) 5. Theodolite (ML-247) 6. Transmissometer (AN/GMQ-10) 7. Radar (AN/FPS-106) 8. Weatherhvision (GMQ-19V)  *Two sets in use.

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Bermuda Islands are located in the Western Atlantic, approximately 575 nautical miles east southeast of Cape Hatteras. Bermuda Island is the largest of the group, measuring 12 miles in length, and averaging about 1 mile in width. Naval Air Station Bermuda is located on the southern side of St. David's Island, one of the smallest islands of the group. Two thirds of the base is built on a reclaimed section of Castle Harbor, an inlet that separates Bermuda Island from St. David's Island.

The surrounding sea is the major factor in controlling Bermuda weather. No great topographic effects are felt. The only noticeable effect will occur with light (less than 14 knots) summer winds from the southeast quadrant. These will produce a cloud bank over the island with bases of 3,000 feet with possible light rain showers. The sea temperature around Bermuda ranges from the low 60's in winter to near 82 degrees F. in summer. In winter, the comparatively warm waters of the Gulf Stream modify the outbreaks of cold air from the North American continent as much as 30 to 40 degrees F. In summer the proximity of the ocean prevents any very high temperatures.

The weather is often described as consisting of two distinct seasons - summer and winter. Summer weather is generally from

May through October. During this period mostly fine weather is the rule with varying degrees of shower activity and predominate light southerly winds. The winter months (December through March) are characterized by frequent frontal passages and migratory low pressure areas moving through, often with very strong and persistent winds.

From early June to early October the average daily maximum temperature is about 80 degrees F. The months of January, February and March have average daily minimums of near 60 degrees F. and average daily maximums of 67 to 68 degrees F.

The average annual rainfall is 53.9 inches. The rainfall is distributed fairly evenly over the year with 4 to 5 inches normal for most months.

Actual hurricane force winds have been experienced on an average of one out of five years. Tropical storms affect Bermuda most frequently during September. February is the windiest month with an average of 8.4 gale days. Other months from November through March average 4 to 7 gale days. The warmer months average less than one gale day.

**BERMUDA**



STN LYRS: HXKP  
WBAN # : 13601  
WMO # : 78016

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VAP

TEMPERATURE		DEG F		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUM		WINDS		MEAN		INCHES		SNOWFALL		DEG F		MAX		MIN	
DAILY	MON	MAX	MIN	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
JAN 68	60	64	76	46	4.5	9.9	3	2.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FEB 68	60	64	77	45	4.1	8.9	3	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MAR 68	60	64	77	45	4.1	8.9	3	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
APR 70	62	66	81	48	2.9	7.7	3	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MAY 74	67	71	83	58	3.9	8.7	3	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JUN 80	73	76	88	63	9.1	14.2	8	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JUL 84	76	80	91	68	4.1	10.6	7	3.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AUG 85	77	82	91	68	9.1	10.5	1.4	3.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SEP 83	76	80	87	66	5.0	10.7	2.0	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
OCT 79	72	76	87	57	6.7	12.6	1.6	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NOV 74	67	71	83	55	4.3	10.3	1.6	4.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEC 70	63	66	78	50	4.4	11.7	1.6	3.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
JAN 75	68	72	81	44	5.8	14.6	3	5.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
FEB 77	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	
MAR 77	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	

REMARKS: \* DATA NOT AVAILABLE. # LESS THAN 0.05 DAY, 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE. THE VALUE LISTED UNDER "PRESS AT FEET 99.9%" INDICATES IT IS EXCEEDED ONLY 0.0% OF THE TIME. EVR MEANS EQUIVALENT YEARS OF RECORD (I.E., THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, FOR).

[illegible]



Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1890	58.2	44.8	48.6	55.4	71.0	72.6	51.0	52.5	72.6	72.2	72.5	64.8	71.7
1891	58.7	45.2	41.6	48.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1892	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1893	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1894	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1895	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1896	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1897	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1898	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1899	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1900	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1901	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1902	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1903	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1904	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1905	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1906	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1907	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1908	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1909	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1910	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1911	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1912	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1913	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1914	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1915	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1916	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1917	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1918	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1919	58.7	45.6	45.6	54.6	71.3	70.6	50.6	50.6	72.1	72.7	70.6	64.7	71.7
1920	58.7	45.6											

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1901	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1902	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1903	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1904	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1905	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1906	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1907	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1908	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1909	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1910	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1911	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1912	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1913	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1914	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1915	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1916	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1917	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1918	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1919	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1920	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1921	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1922	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1923	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1924	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1925	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1926	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1927	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1928	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40
1929	1.49	1.52	2.03	2.09	2.09	1.48	2.00	2.18	2.09	1.79	2.01	2.01	20.40

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun	Total
1898-99	0	0	0	0	0	0	20	35	49	7	0	0	N
1899-00	0	0	0	0	0	0	13	39	60	39	1	0	213
1900-01	0	0	0	0	0	0	10	39	60	39	1	0	213
1901-02	0	0	0	0	0	0	10	39	60	39	1	0	216
1902-03	0	0	0	0	0	0	32	57	82	4	0	0	162
1903-04	0	0	0	0	0	0	17	37	59	37	0	0	N
1904-05	0	0	0	0	0	0	19	51	69	40	17	0	263
1905-06	0	0	0	0	0	0	73	108	72	35	20	3	317
1906-07	0	0	0	0	0	0	18	36	150	132	45	0	440
1907-08	0	0	0	0	0	0	12	76	77	134	31	0	286
1908-09	0	0	0	0	0	0	43	61	76	67	31	0	281
1909-10	0	0	0	0	0	0	26	77	40	89	28	1	199
1910-11	0	0	0	0	0	0	39	78	53	30	63	0	237
1911-12	0	0	0	0	0	0	52	82	104	71	34	0	354
1912-13	0	0	0	0	0	0	33	57	138	79	43	1	370
1913-14	0	0	0	0	0	0	24	38	44	104	62	1	208
1914-15	0	0	0	0	0	0	24	M	M	M	M	M	N
1915-16	0	0	0	0	0	0	30	M	M	M	M	M	N
1916-17	0	0	0	0	0	0	70	77	40	37	72	9	263
1917-18	0	0	0	0	0	0	33	39	88	31	10	0	212
1918-19	0	0	0	0	0	0	37	13	91	15	12	0	114
1919-20	0	0	0	0	0	0	4	13	54	97	0	0	131
1920-21	0	0	0	0	0	0	4	38	43	14	8	0	109
1921-22	0	0	0	0	0	0	13	128	68	38	6	0	237
1922-23	0	0	0	0	0	0	19						
MEAN	0	0	0	0	0	2	33	56	64	62	28	1	238

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct	Nov	Dec	Total
1949	38	22	40	64	191	313	482	495	514	351	199	90	3246
1950	55	51	35	40	136	304	504	315	422	328	180	84	2763
1951	28	31	37	68	150	336	490	534	461	339	127	34	2774
1952	24	31	35	68	150	336	490	534	461	339	127	34	2774
1953	25	16	23	66	220	309	517	517	517	311	216	131	2804
1954	46	16	66	106	220	343	506	519	477	348	216	58	3084
1955	12	7	28	67	168	337	485	502	452	322	137	33	2567
1956	3	21	48	97	180	338	479	486	486	328	137	123	2696
1957	30	33	52	94	187	313	487	518	476	316	169	91	2739
1958	34	1	2	21	137	310	487	513	476	316	169	91	2739
1959	34	1	2	21	137	310	487	513	476	316	169	91	2739
1960	32	32	29	51	143	324	484	471	411	336	229	89	2688
1961	32	32	29	51	143	324	484	471	411	336	229	89	2688
1962	19	20	32	48	132	356	478	480	462	346	164	62	2697
1963	49	18	6	66	142	316	444	510	489	351	153	68	2867
1964	25	13	33	58	131	348	500	495	426	340	112	19	2641
1965	7	4	16	40	133	351	525	535	451	337	111	82	2604
1966	27	9	18	34	143	310	487	504	486	346	113	87	2504
1967	34	30	17	20	136	342	448	437	417	317	122	48	2318
1968	34	30	17	20	136	342	448	437	417	317	122	48	2318
1969	34	30	17	20	136	342	448	437	417	317	122	48	2318
1970	34	30	17	20	136	342	448	437	417	317	122	48	2318
1971	34	30	17	20	136	342	448	437	417	317	122	48	2318
1972	34	30	17	20	136	342	448	437	417	317	122	48	2318
1973	34	30	17	20	136	342	448	437	417	317	122	48	2318
1974	34	30	17	20	136	342	448	437	417	317	122	48	2318
1975	34	30	17	20	136	342	448	437	417	317	122	48	2318
1976	34	30	17	20	136	342	448	437	417	317	122	48	2318
1977	34	30	17	20	136	342	448	437	417	317	122	48	2318
1978	34	30	17	20	136	342	448	437	417	317	122	48	2318
1979	34	30	17	20	136	342	448	437	417	317	122	48	2318
1980	34	30	17	20	136	342	448	437	417	317	122	48	2318
1981	34	30	17	20	136	342	448	437	417	317	122	48	2318
1982	34	30	17	20	136	342	448	437	417	317	122	48	2318
1983	34	30	17	20	136	342	448	437	417	317	122	48	2318
1984													

Partial monthly values were not included in means.



STATION NO. ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT.)	CALL SIGN	WMO NUMBER
13601	Bermuda	32° 22' N	64° 40' W	11	MXKF	78016

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	N. wall of Weather Service Office Bldg 1 W. wall of Weather Service Office Bldg 42	Navy	1948	1954	32° 16' N	64° 51' W	40.8	Mercurial	
2.		"	1954	1960	"	"	44.0		
3.		"	1960	1966	"	"	44.0		
4.		"	1966	1969	"	"	30.5	"	
1a.	Weather Service Office, Bldg 1 Weather Service Office, Bldg 42	"	1960	1966	"	"	47	Aneroid	
2a.		"	1966	1969	"	"	32		
5.	Moved to Kindley AFB 22 Oct 69. Relocation effective 1 July 70.	"	1968*		32° 22' N	64° 40' W	4.0	Fortin	
3a.	Building 1079	"	1977		"	"	9.0	Aneroid	
	*Kindley AFB								

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1948	Roof of Admin. Building	ML 400B/ UMQ 5	RD-108A	91'	1. Barograph (ML 563A/UM)
2.	1954	Roof of control tower	"	RD-108B	61'	2. Auto Met Sta (GMQ 29)
3.	1960	Roof of AN/GMQ 14A shed	"	"	102 MSL	3. Ceiling light (ML 121)
4.	1960	Roof of hangar #1	"	"	75 MSL	4. Cloud height set (GMQ 13A) (2 ea)
5.	1966	Third deck roof of Bldg 42	"	"	8'	5. Theodolite (ML 247)
6.	1966	Transmitter also 1600' W from end of runway 30	*UMQ 5	RD-108B		6. Radar (FFS-106)
		Moved to Kindley AFB 22 Oct 69. Relocation effective 1 July 70.				7. Radiosonde (GMD-1)
7.	1970	600' S from end of runway 12	*UMQ 5	"	12'	8. APT (AN/GKR-4)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Brunswick is located one mile southeast of the city of Brunswick, Maine. The terrain surrounding the station slopes gently downward to several inlets and bays which extend northward from the open sea to within one to two miles of the station.

As a general rule, Brunswick has a very pleasant summer and autumn. Maximum temperatures during the summer months range from the low 50's in April to the high 70's in July and August. Very few summer nights are too warm or humid for comfortable sleeping. Autumn has the greatest number of sunny days and least cloudiness. Winters are quite severe, but begin late and then extend deeply into the normal spring time. Temperatures below zero are recorded frequently each winter. Cold waves are sometimes accompanied by strong winds, but extremely low temperatures (i.e. -20 degrees F.) are generally accompanied by light winds and clear nights. Mean maximum temperatures during the winter months range from mid to low 30's.

The Appalachian Mountains cause an increased frequency of winds from the south or south-west. This is the prevailing direction during summer, spring, and fall, and northerly winds prevail in the winter. The diurnal land and sea breeze

characteristic of the coastal region is the dominate factor in the summer and autumn. Land breezes are predominately northerly in direction and sea breezes southerly.

Advection fog during the spring and summer and radiation fog during the autumn frequently reduce visibility to near or below GCA minimums. Advection fog may persist for several days.

Brunswick's average annual precipitation is 45 inches. Normally 82 inches of snow falls during the winter. True blizzards in the form of "Nor'easters" can pile up 21 inches in 12 hours. Precipitation during the summer months is usually in the form of showers. Tropical storms may bring substantial rainfall to the area during the summer or early autumn.

Severe weather can come in the form of hurricanes, thunderstorms, and Northeasters. Occasionally in August or September, hurricanes move northward into New England. One such storm in August 1954 resulted in the maximum wind of 73 knots. Thunderstorms have an average occurrence of 4 times a month during June through August. Severe weather during the winter is limited to Northeasters, which can give the area heavy rain and snow with winds to 50 knots.

**BRUNSWICK, MAINE**







## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1965	3.1	2.9	1.6	1.8	5.9	6.7	4.1	1.8	2.9	4.3	3.4	3.7	
1966	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1967	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1968	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1969	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1970	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1971	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1972	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1973	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1974	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1975	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1976	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1977	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1978	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1979	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1980	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1981	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1982	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1983	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1984	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1985	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1986	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1987	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1988	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1989	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1990	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1991	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1992	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1993	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1994	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1995	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1996	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1997	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1998	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
1999	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2000	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2001	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2002	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2003	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2004	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2005	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2006	3.1	2.7	1.1	3.2	1.9	2.1	1.1						
2007	3.1	2.7	1.1	3.2	1.9	2.1	1.1						

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1945	49	94	98	43	98	43	98	43	98	43	98	43	1042
1946	50	97	100	44	99	44	99	44	99	44	99	44	1119
1947	51	98	101	45	100	45	100	45	100	45	100	45	1196
1948	52	99	102	46	101	46	101	46	101	46	101	46	1273
1949	53	100	103	47	102	47	102	47	102	47	102	47	1350
1950	54	101	104	48	103	48	103	48	103	48	103	48	1427
1951	55	102	105	49	104	49	104	49	104	49	104	49	1504
1952	56	103	106	50	105	50	105	50	105	50	105	50	1581
1953	57	104	107	51	106	51	106	51	106	51	106	51	1658
1954	58	105	108	52	107	52	107	52	107	52	107	52	1735
1955	59	106	109	53	108	53	108	53	108	53	108	53	1812
1956	60	107	110	54	109	54	109	54	109	54	109	54	1889
1957	61	108	111	55	110	55	110	55	110	55	110	55	1966
1958	62	109	112	56	111	56	111	56	111	56	111	56	2043
1959	63	110	113	57	112	57	112	57	112	57	112	57	2120
1960	64	111	114	58	113	58	113	58	113	58	113	58	2197
1961	65	112	115	59	114	59	114	59	114	59	114	59	2274
1962	66	113	116	60	115	60	115	60	115	60	115	60	2351
1963	67	114	117	61	116	61	116	61	116	61	116	61	2428
1964	68	115	118	62	117	62	117	62	117	62	117	62	2505
1965	69	116	119	63	118	63	118	63	118	63	118	63	2582
1966	70	117	120	64	119	64	119	64	119	64	119	64	2659
1967	71	118	121	65	120	65	120	65	120	65	120	65	2736
1968	72	119	122	66	121	66	121	66	121	66	121	66	2813
1969	73	120	123	67	122	67	122	67	122	67	122	67	2890
1970	74	121	124	68	123	68	123	68	123	68	123	68	2967
1971	75	122	125	69	124	69	124	69	124	69	124	69	3044
1972	76	123	126	70	125	70	125	70	125	70	125	70	3121
1973	77	124	127	71	126	71	126	71	126	71	126	71	3198
1974	78	125	128	72	127	72	127	72	127	72	127	72	3275
1975	79	126	129	73	128	73	128	73	128	73	128	73	3352
1976	80	127	130	74	129	74	129	74	129	74	129	74	3429
1977	81	128	131	75	130	75	130	75	130	75	130	75	3506
1978	82	129	132	76	131	76	131	76	131	76	131	76	3583
1979	83	130	133	77	132	77	132	77	132	77	132	77	3660
1980	84	131	134	78	133								

## MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1905	24.2	38.5	44.0	49.5	51.0	51.0	50.0	56.7	61.0	48.6	37.9	22.3	401.1
1906	13.5	18.8	21.2	24.2	26.3	28.3	30.3	32.3	34.3	36.3	38.3	40.3	345.1
1907	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1908	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1909	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1910	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1911	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1912	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1913	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1914	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1915	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1916	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1917	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1918	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1919	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1920	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1921	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1922	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1923	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1924	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1925	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1926	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1927	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1928	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1929	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1930	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1931	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1932	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1933	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1934	11.5	16.5	21.5	26.5	31.5	36.5	41.5	46.5	51.5	56.5	61.5	66.5	425.1
1935	11.5	16.5											

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "p" denotes partial record, i.e. less than 10 days record missing.



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WHO NUMBER	
14611		Brunswick, Maine		43° 53' N		69° 56' W		75 MSL		KNHZ		74392	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARR. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BARMETER					
1.	Weather Service Office	Navy	1951	1959	43° 53' N	69° 56' W	79	Mercurial	24				
2.	" " (replacement)	"	1959	1969	"	"	"	"	24				
3.	" "	"	1969		"	"	"	"	24				
1a.	" "	"	1960		"	"	81	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1951	Control tower roof	Selsyn	Triple	1. Barograph (ML 3) 2. Auto Met station (AN/GMQ-29) 3. Cloud height set (AN/GMQ-13) 4. Transmissometer (AN/GMQ-10C) 5. Radar Recorder Fax (RO 415 GMH) 6. RVR Converter, Display
2.	1959	Six hundred feet on bearing of 330 degrees from building # 200	UMQ-5	RD-108	* Two sets in use.

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Base Camp Pendleton occupies some 125,000 acres of land and is located along the Pacific Coast approximately one-half way between the cities of San Diego and Los Angeles. The Air Facility is located in the southwest section of the base approximately five miles east of the coast. The Pacific Ocean provides cool summers and warm winters and the relative humidity remains within the human comfort range. The base does not experience the heavy smog conditions common to urban areas to the north and south.

The high incidence of night and early morning low stratus and fog - especially during the winter months is the primary source of unfavorable flying weather. Summertime fog and stratus is much less a threat to flying safety. It tends to remain along the immediate coast rather than moving inland. Fog and stratus during the winter months is much more unpredictable and can seriously hamper low - level flying.

A sea breeze is experienced almost every day of the year. Land breezes and drainage winds are experienced but are considered to be negligible because of low speeds and variable directions. Autumn and winter Santa Ana winds do affect the base but the high surface winds associated with this phenomena are rarely experienced. During Santa Ana conditions fire stations at the 4,000 foot level have reported gusts up to 60 knots while at the same time winds at the airfield were less than 15 knots. The uneven terrain over most of the base does not allow for any real funnel effect.

Rainfall at Camp Pendleton is heaviest during the winter months, particularly late November through early February. Rainfall amounts increase inland at higher elevations. This is also true of convective type precipitation during the summer months. Most thunderstorm activity is restricted to inland areas of higher elevations but the occasional storm does stray to the coastal section of the base. Destructive weather conditions, while possible, are not considered a serious threat in this area.

CAMP PENDLETON, CALIFORNIA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: CAMP PENDLETON, CALIFORNIA  
LOCATION: 1 N33 18 W117 21

PERIOD: OCT 66-DEC 77  
ELEV: 1 63

STN LTR: KDCS  
HNO: 1 03154  
HNO: 1

TEMPERATURE		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUMIDITY		DEW POINT		SFC WINDS		MEAN PRECIP		MEAN INCHES		SNOWFALL		MT Y		MAX		MIN	
DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN		DAILY MEAN	
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
JAN 64	43	54	86	28	3.9	6.8	1.0	1.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FEB 65	44	55	90	33	3.9	8.7	1.8	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAR 67	45	56	90	31	1.8	1.8	1.8	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APR 67	45	56	94	32	1.9	1.9	1.9	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MAY 68	52	61	86	40	2.2	2.2	2.2	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JUN 70	56	63	90	47	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JUL 77	60	69	96	46	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AUG 70	62	71	102	44	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEP 79	61	70	106	46	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
OCT 75	52	63	103	37	1.1	1.1	1.1	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NOV 71	47	59	94	34	1.4	1.4	1.4	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DEC 64	41	53	82	25	1.7	1.7	1.7	1.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANN 71	51	61	100	25	14.1	8.7	1.9	1.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ALL HRS	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

REMARKS: DATA NOT AVAILABLE. # LESS THAN 0.3 DAY, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE. OF THE TIME.  
THE VALUE LISTED UNDER "PRESS ALT FEET 98.98" INDICATES IT IS EXCEEDED ONLY 0.08% OF THE TIME.  
EVR MEANS EQUIVALENT YEARS OF RECORD (I.E., THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, FOR).

FLYING MEAS		HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
CEILING		HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
LESS 1000	01	50	44	51	56	76	82	69	71	66	52	41	42	59	6																
FT AND/OR	07	38	42	47	45	51	50	21	20	32	36	30	30	37	7																
LESS 1 MI	13	33	35	32	31	32	34	11	9	20	20	22	27	25	7																
ALL HRS	22	19	16	14	16	19	16	7	6	20	20	22	27	25	7																
LESS 1000	01	30	18	22	17	25	36	31	33	28	24	21	21	26	6																
FT AND/OR	07	20	18	15	15	12	6	8	6	7	11	13	13	12	7																
LESS 1 MI	13	16	14	11	16	9	6	7	6	6	9	12	14	10	7																
ALL HRS	22	19	16	14	16	9	6	7	6	6	9	12	14	10	7																
LESS 1000	01	20	14	9	11	3	1	1	2	4	12	13	14	8	6																
FT AND/OR	07	11	13	9	15	6	1	1	2	4	7	9	9	7	7																
LESS 1/2 MI	13	12	11	8	16	5	3	3	2	4	7	9	12	8	7																
ALL HRS	22	19	16	14	16	5	3	3	2	4	7	9	12	8	7																
LESS 1000	01	17	10	7	11	2	1	1	2	3	10	12	12	7	6																
FT AND/OR	07	11	13	9	15	6	1	1	2	4	7	9	9	7	7																
LESS 1/4 MI	13	12	11	8	16	5	3	3	2	4	7	9	12	8	7																
ALL HRS	22	19	16	14	16	5	3	3	2	4	7	9	12	8	7																

(NOTE: Due to insufficient data, percentage frequencies are not shown for 01, 04, 16, 19, 22 and ALL HRS.)



# MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1960	51.40	43.7	55.3	62.3	68.4	70.5	68.6	63.6	60.0	52.2	46.0	41.2	58.8
1961	52.4	44.5	56.4	63.5	69.6	71.7	69.8	64.9	61.0	53.1	46.9	42.3	60.0
1962	53.4	45.5	57.5	64.6	70.7	72.8	70.9	66.0	62.1	54.2	48.0	43.4	61.1
1963	54.4	46.5	58.5	65.6	71.7	73.8	71.9	67.0	63.1	55.2	49.0	44.5	62.2
1964	55.4	47.5	59.5	66.6	72.7	74.8	72.9	68.0	64.1	56.2	50.0	45.5	63.3
1965	56.4	48.5	60.5	67.6	73.7	75.8	73.9	69.0	65.1	57.2	51.0	46.5	64.4
1966	57.4	49.5	61.5	68.6	74.7	76.8	74.9	70.0	66.1	58.2	52.0	47.5	65.5
1967	58.4	50.5	62.5	69.6	75.7	77.8	75.9	71.0	67.1	59.2	53.0	48.5	66.6
1968	59.4	51.5	63.5	70.6	76.7	78.8	76.9	72.0	68.1	60.2	54.0	49.5	67.7
1969	60.4	52.5	64.5	71.6	77.7	79.8	77.9	73.0	69.1	61.2	55.0	50.5	68.8
1970	61.4	53.5	65.5	72.6	78.7	80.8	78.9	74.0	70.1	62.2	56.0	51.5	69.9
1971	62.4	54.5	66.5	73.6	79.7	81.8	79.9	75.0	71.1	63.2	57.0	52.5	71.0
1972	63.4	55.5	67.5	74.6	80.7	82.8	80.9	76.0	72.1	64.2	58.0	53.5	72.1
1973	64.4	56.5	68.5	75.6	81.7	83.8	81.9	77.0	73.1	65.2	59.0	54.5	73.2

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1960	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1961	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1962	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1963	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1964	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1965	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1966	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1967	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1968	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1969	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1970	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1971	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1972	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
1973	2.13	1.84	1.73	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7

# HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
65-66	10	10	10	10	10	10	10	10	10	10	10	10	10
66-67	10	10	10	10	10	10	10	10	10	10	10	10	10
67-68	10	10	10	10	10	10	10	10	10	10	10	10	10
68-69	10	10	10	10	10	10	10	10	10	10	10	10	10
69-70	10	10	10	10	10	10	10	10	10	10	10	10	10
70-71	10	10	10	10	10	10	10	10	10	10	10	10	10
71-72	10	10	10	10	10	10	10	10	10	10	10	10	10
72-73	10	10	10	10	10	10	10	10	10	10	10	10	10
73-74	10	10	10	10	10	10	10	10	10	10	10	10	10

# COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1960	10	10	10	10	10	10	10	10	10	10	10	10	10
1961	10	10	10	10	10	10	10	10	10	10	10	10	10
1962	10	10	10	10	10	10	10	10	10	10	10	10	10
1963	10	10	10	10	10	10	10	10	10	10	10	10	10
1964	10	10	10	10	10	10	10	10	10	10	10	10	10
1965	10	10	10	10	10	10	10	10	10	10	10	10	10
1966	10	10	10	10	10	10	10	10	10	10	10	10	10
1967	10	10	10	10	10	10	10	10	10	10	10	10	10
1968	10	10	10	10	10	10	10	10	10	10	10	10	10
1969	10	10	10	10	10	10	10	10	10	10	10	10	10
1970	10	10	10	10	10	10	10	10	10	10	10	10	10
1971	10	10	10	10	10	10	10	10	10	10	10	10	10
1972	10	10	10	10	10	10	10	10	10	10	10	10	10
1973	10	10	10	10	10	10	10	10	10	10	10	10	10

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

CAMP PENDLETON, CALIFORNIA



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
03154		Camp Pendleton, California		33° 18' N		117° 21' W		63		KOCS			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
-	None	MCB							Var				
1.	Weather service office (First deck of Airfield Ops Bldg)	MCALF	1968	1969	33° 18' N	117° 21' W	66	Fortin	"				
2.	Weather office (moved within office)	"	1969		"	"	81	"	"				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1962	On roof above Weather Office	AN/UMQ 5	RD-108	42' MSL	* Observation site moved to MCALF Camp Pendleton 1 March 68.
1a.	1968	Atop control tower	"	"	120' MSL	1. Barometer (Aneroid)
1b.	1969	Adjacent Rwy 03-21 approx. 700' North Hangar 2360	"	"	85' MSL	2. Barograph (Marine) 3. Hygrothermograph

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Cecil Field is located southwest of Jacksonville, Fla. in a heavily pine wooded area on a small plateau 75 feet above sea level. The surrounding terrain is swampy with elevations ranging from sea level to 25 feet above. The Atlantic Ocean is 27 miles to the east and the great Okefenokee Swamp lies 25 miles to the northwest.

NAS Cecil Field has a warm, temperate climate with hot summers and mild winters.

Good flying conditions prevail during daylight hours throughout the year. Poor flying weather occurs most frequently during the early morning hours. Radiation fog, generally forming after 0200 local time and dissipating before 0900, is common throughout the year with the greatest frequency observed from September through April. The fog is most persistent during December and January.

During the summer, convective clouds usually form by 1000 local time with showers and thunderstorms developing in the area to the west and southwest of the station by mid-afternoon. These showers and thunderstorms move to the northeast over the station with the majority of the activity occurring between 1500 and 1900 local time.

Polar air masses invade the area occasionally in October, increasing in frequency to weekly in January and February and becoming less frequent in March and April. Most of the poor flying weather during the winter is associated with these systems. Light rain and/or

drizzle and fog are common during these periods.

In July the prevailing wind direction is from the south and southwest. An easterly sea breeze occurs during the late afternoon and is of short duration. During the winter months, northerly winds prevail.

The average annual rainfall for the station is 52.3 inches. Traces of snow have been recorded from December to March on an average of once every 4 years.

Temperatures of 100 degrees F. have been recorded in all months from May to August. The summer maximum temperature is usually higher than at NAS Jacksonville due to the greater distance from the Atlantic Ocean and the late onset and short duration of the afternoon sea breeze. Below freezing temperatures occur on an average of 14 mornings during the winter. Freezing temperatures normally do not persist longer than four hours.

Thunderstorms have been recorded in all months with the greatest frequency of occurrence in June, July, and August. Tornadoes are occasionally reported in the general area although none have been observed at NAS Cecil Field. Tornadoes generally occur with winter cold fronts and on the fringes of tropical storms. Tropical storms and hurricanes occasionally approach the area from the east early in the hurricane season and follow the coast northward. The station is located far enough inland so that it doesn't receive the full force of the storm wind.

CECIL FIELD, FLORIDA







## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1932	H	H	A	229	342	440	487	524	H	H	H	H	2,714
1933	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1934	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1935	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1936	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1937	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1938	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1939	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1940	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1941	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1942	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1943	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1944	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1945	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1946	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1947	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1948	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1949	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1950	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1951	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1952	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1953	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1954	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1955	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1956	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1957	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1958	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1959	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1960	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1961	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1962	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1963	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1964	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1965	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1966	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1967	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1968	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1969	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1970	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1971	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1972	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1973	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1974	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1975	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1976	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1977	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1978	H	H	H	H	H	H	H	H	H	H	H	H	2,714
1979	H	H	H	H	H	H	H	H	H	H	H	H	2,714

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1927	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1928	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1929	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1930	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1931	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1932	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1933	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1934	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1935	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1936	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1937	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1938	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1939	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1940	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1941	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1942	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1943	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1944	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1945	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1946	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1947	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1948	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1949	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1950	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1951	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1952	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1953	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1954	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1955	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1956	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1957	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1958	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1959	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1960	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1961	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1962	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1963	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1964	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1965	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1966	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1967	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1968	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1969	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1970	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1971	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1972	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1973	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1974	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1975	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1976	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1977	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1978	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1979	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1980	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1981	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1982	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1983	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1984	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1985	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1986	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1987	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1988	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1989	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1990	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1991	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1992	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1993	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1994	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1995	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1996	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1997	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1998	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
1999	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2000	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2001	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2002	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2003	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2004	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2005	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2006	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2007	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2008	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2009	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2010	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2011	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2012	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2013	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2014	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2015	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2016	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2017	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2018	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2019	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2020	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2021	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2022	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2023	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2024	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2025	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2026	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2027	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2028	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2029	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2030	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2031	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2032	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	74.0
2033	36.7	34.0	37.2	73.3	79.5	79.5	81.7	78.1P	H	H	H	H	

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. IN SUMMARY		STATION NAME		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93832		Cecil Field, Florida		30°13'N		81°53'W		KNZC			

STATION LOCATION AND INSTRUMENTATION HISTORY											
NUMBER OF HAND-LOCATIONS	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.	Weather Service Office	Navy		1955	30°13'N	81°53'W	80	Mercurial	Var		
2.	New barometer installed	"	1955	1960	"	"	80	"	24		
3.	Moved within office	"	1960	1977	"	"	*90.1	"	24		
1a.	Metro Office	"	1964		"	"	*93.1	Aneroid	24		
* From 1969-1973 heights varied. Height reported on 1973 WBAN 10D.											

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	Installed	Atop control tower	Selsyn		1. Barograph (open scale)
1a.	"	"	AN/UMQ-5		2. Ceiling light (ML-121)
2.	1955	Lowered	Selsyn	Double	3. Cloud height set (AN/GMQ-13B)
3.	1958	Installed 949' south southeast of Ops Bldg (replacement for selsyn)	AN/UMQ-5	RD-108	4. Transmissometer (AN/GMQ-10C)
4.	1971	On top control tower	"	"	5. Auto Met station (AN/GMQ-29)
5.	1975	640' SSE of Ops Bldg	"	GMQ-29	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The climate of Charleston, S.C. is temperate, modified considerably by the nearness to the ocean. The marine influence is noticeable during winter when the minimum temperatures are sometimes 10 degrees to 15 degrees higher on the naval base than at the Charleston Municipal Airport. By the same token, maximum temperatures are dampened 3 degrees lower on the base. The prevailing winds are northerly in the fall and winter, southerly in the spring and summer.

Summer is warm and humid. Temperatures of 100 degrees F. or higher are infrequent. Maximum temperatures are generally several degrees lower along the coast than inland due to the cooling effect of the sea breeze. Summer is the rainiest season with about 40% of the annual fall. The rain, aside from occasional tropical storms, is generally of a shower or thundershower nature, producing variable amounts over scattered areas.

The fall season passes through the warm "Indian Summer" period to the prewinter cold spells which begin late in November. From late September to early November the weather is mostly sunny and extremes of temperature are rare. Late summer and early fall, however, is the period of maximum threat to the South Carolina coast from hurricanes. Some memorable hurricanes that have affected the Charleston area occurred in August 1885, August 1893,

August 1911, July 1916, September 1928, August 1940, August 1952, and September 1959. The highest storm tide of record for which accurate heights were obtained was 11.2 feet above mean low water in the August 1893 storm.

The winter months, December through February, are mild with rainfall averaging 18% of the annual total. The winter rainfall is generally of a more uniform type, although a few thundershowers do occur. There is some chance of a snow flurry, with the best probability of its occurrence in January, but significant amount is rarely measured. An average winter would experience less than one cold wave and severe freeze. Temperatures of 20 degrees or less are very unusual.

The most spectacular time of the year, weatherwise, is spring with its rapid changes from windy and cold in March to warm and pleasant in May. The spring rainfall represents about 20% of the total annual rain. Severe local storms are more likely to occur in the spring than in other seasons; however, some of the most destructive local storms of the 20th century were a series of severe tornadoes on September 29, 1938, and a single small tornado accompanying a hurricane on September 11, 1960.

CHARLESTON, SOUTH CAROLINA







# MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1973	54.6	53.8	60.8	64.4	74.0	78.1	81.5	80.5	76.8	66.3	59.2	51.7	66.7
1974	54.6	53.8	60.8	64.4	74.0	78.1	81.5	80.5	76.8	66.3	59.2	51.7	66.7
1975	54.6	53.8	60.8	64.4	74.0	78.1	81.5	80.5	76.8	66.3	59.2	51.7	66.7
1976	54.6	53.8	60.8	64.4	74.0	78.1	81.5	80.5	76.8	66.3	59.2	51.7	66.7
MEAN	54.6	53.8	60.8	64.4	74.0	78.1	81.5	80.5	76.8	66.3	59.2	51.7	66.7

# TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1974	5.18	2.29	4.86	3.17	4.28	2.81	9.21	4.82	4.00	.84	.51	2.12	44.09
1975	5.18	2.29	4.86	3.17	4.28	2.81	9.21	4.82	4.00	.84	.51	2.12	44.09
1976	5.18	2.29	4.86	3.17	4.28	2.81	9.21	4.82	4.00	.84	.51	2.12	44.09
MEAN	3.49	1.50	4.88	1.36	4.69	3.30	6.21	7.25	3.14	1.89	2.05	3.31	45.07

# HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
72-73	0	0	0	27	126	377	123	426	123	88	1	0	1212
73-74	0	0	0	27	126	377	123	426	123	88	1	0	1212
74-75	0	0	0	27	126	377	123	426	123	88	1	0	1212
75-76	0	0	0	27	126	377	123	426	123	88	1	0	1212
76-77	0	0	0	27	126	377	123	426	123	88	1	0	1212
MEAN	0	0	0	71	232	407	340	315	165	91	4	0	1626

# COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1973	55	7	26	82	294	381	472	464	327	71	28	0	2237
1974	55	7	26	82	294	381	472	464	327	71	28	0	2237
1975	55	7	26	82	294	381	472	464	327	71	28	0	2237
1976	55	7	26	82	294	381	472	464	327	71	28	0	2237
MEAN	20	5	43	78	287	401	517	486	364	117	35	2	2355

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65 °F.

"M" indicates missing record. "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO. ON SUMMARY:		STATION NAME:		LATITUDE:		LONGITUDE:		STATION ELEV. (FT):		CALL SIGN:		WMO NUMBER:	
13758		Charleston, S. C.		32°50'N		79°56'W		13		KNAO			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			STATION (FT)	TYPE BAROMETER					
1.	Building NS 54	Navy	1973	1974	32°51'N	79°57'W	4	Aneroid	24				
2.	Building NS 660, Pier "Y"	Navy	1974		32°50'N	79°56'W	13	Aneroid	24				
7 MILES IS MAXIMUM REPORTED VISIBILITY													
NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE							
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND								
1.	April 75	SE corner roof Bldg 660	AN/UMQ-5	RD 108	41'	1. Wind recorder operational (Indicator only on GMQ-29-Apr 75)							
2.	Dec 75	SE corner roof Bldg 660	GMQ-29	Temp/ Dew pt	36'	2. Remainder GMQ-29 (except pressure) operational Dec 75							
						3. Barograph (marine) - 18 ft MSL							
						4. GMH-6(v) Radar recorder							



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Chase Field is located in South Central Texas, 5 miles east southeast of Beeville, Texas. The field elevation is 190 feet above mean sea level. The surrounding terrain of Chase Field is essentially flat and of a brushwood nature. Inland bays and the Gulf Coast tidelands extend within 26 miles of the station. The closeness of these bodies of water are an important influence on the local weather.

The climate of this area is characteristic of subtropical regions with no sharply established delineation of the four seasons. Summer and winter predominate. Climatically, summer begins with the month of May and lasts through September. The highest temperatures are normally reached in July and August. The sea breeze which usually arrives about mid-afternoon brings relief from the hot temperatures by evening. During this period, the local weather is under the influence of maritime tropical air moving across the Gulf of Mexico with a general southeasterly component.

The first "Norther" marks the beginning of autumn. Moist gulf air is impacted by a strong surge of cold dense arctic air and usually spawns several squall lines over the area. Weather associated with these squalls and fronts consists of sudden lowering of ceilings and visibilities in showers and thundershowers. Strong gusty winds occur along the frontal zone.

The winter season is relatively short, from December through Feb-

ruary. This season is not usually marked by any prolonged periods of cold weather, but rather by short spans of two or three days, depending on the depth of the cold air mass. The winter season is one of many changes. The weather fluctuates between warm and cold, clear and cloudy, wet and dry, as a wide variety of weather systems of various intensities move through the local area. Winters differ sharply from year to year. Normally, winter temperatures are sufficiently mild as to cause little or no interference with outdoor operations.

The most persistent flying safety problem is the fog and stratus that forms over the Gulf Coast. Stratus usually forms between late evening and early morning with bases 300 to 1,000 feet. The stratus often lowers near sunrise becoming fog, even with wind speeds of 10 to 12 knots.

The average annual rainfall is 29 1/2 inches with the greatest amounts in the months of May through October during thunderstorm activity. Above average amounts of rain are often noticed when tropical storms or hurricanes pass south of Chase Field. Flooding caused by heavy precipitation is the greatest danger presented by hurricanes. Hurricane winds generally have abated as the storm moves overland toward Chase Field.

The prevailing wind direction is from the south-southeast with speeds predominately 7 to 10 knots.

**CHASE FIELD, TEXAS**







## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO ON SUMMARY		STATION NAME		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
12925		Chase Field (Beeville), Texas		28°22'N		97°40'W		190		KNIR	
STATION LOCATION AND INSTRUMENTATION HISTORY											
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.	Weather office, located 2nd deck in the southeast corner of hangar	NAAAS	1954	1956	28°22'N	97°40'W	203	Mercurial	24		
2.	" " " " " "	"	1956	1958	"	"	208	"	24		
3.	Weather Service Office located 1st deck of the Ops Bldg	"	1958	1962	"	"	196	"	24		
4.	" " " " " "	NAS	1962	1976	"	"	200	"	24		
1a.	Weather Service Office located 1st deck of the Ops Bldg	NAS	1971		"	"	202	Aneroid	24		

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed 1954	Second deck in the northeast corner of hangar	AN/UMQ-5C	RD-108B	56'	1. Barograph 2. Semi-auto Met.Sta (AN/GMQ-14B) 3. Ceiling light (ML-121) 4. Cloud height set (AN/GMQ-13C) 5. Transmissometer (AN/GMQ-10) 6. Radar (AN/FPS-106) 7. Weather vision (AN/GMQ-19A)
2.	1955	Weather office (replacement)		"		
3.	1957	" " " "		"		
4.	1960	On top of tower		"	71'	
5.	1962	Between the parallel runways		"	14'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

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## NARRATIVE SUMMARY

Marine Corps Air Station, Cherry Point is located on the Neuse River in the coastal area of North Carolina. The Atlantic Ocean is southeast of the station, 16 miles to the south and 36 miles to the east. Land surrounding the air station is generally heavily wooded, level lowlands and swamps.

The maritime location makes the climate of Cherry Point rather mild for its latitude. The daily range in temperatures is moderate compared to a continental type of climate. As a rule, summers are quite warm and humid, but excessive heat is rare. Sea breezes, arriving around noon, tend to alleviate the inland heat. Averages show afternoon temperatures reach 90 degrees F. or higher about 33% of the days in midsummer. During the colder part of the year, numerous outbreaks of polar air masses reach the middle Atlantic Coast, causing sharp drops in temperatures. The warming effects of the ocean air modify these cold outbreaks by their long trajectories from the source regions and the effects of passing over the Appalachian Mountains. During the most severe cold spells on record the temperatures have only fallen to 8 degrees F. on three occasions. Normally only once each winter is there an entire day when the temperature fails to rise above the freezing point.

Rainfall in this area is usually ample and fairly well - distributed throughout the year. Spring is the driest season and summer the wettest. Summer rainfall comes principally from thunderstorms. Thunderstorms occur on 1 out of 3 or 4 days during the summer. Winter rain is more likely to be of the slow, steady rain or drizzle lasting 1 or 2 days. Seldom is there a winter without a few flakes of snow but several years may pass without a measurable amount. Appreciable accumulation of snow on the ground is rare.

During the warm months the prevailing wind direction is south-southwest, the normal sea breeze direction. During the cool months of the year the prevailing wind direction is north-northeast. Although this area is in the hurricane belt, this section of the coast rarely receives hurricane force winds. The strongest wind recorded at Cherry Point was 93 knots from the northeast in September 1955 due to the passage of a hurricane. A tornado has never affected this station but a few funnel clouds can be expected.

Visibility is normally good in this area although early morning shallow ground fog with a light southwesterly flow is quite common. Prolonged periods of haze can be experienced with a stable, stagnant summertime air mass.

CHERRY POINT, NORTH CAROLINA







MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1895	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1896	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1897	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1898	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1899	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1900	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1901	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1902	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1903	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1904	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1905	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1906	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1907	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1908	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1909	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1910	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1911	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1912	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1913	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1914	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1915	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1916	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1917	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1918	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1919	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
1920	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5
MEAN	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5	51.5

MEAN 55.4 47.0 55.5 61.9 65.4 70.1 75.5 78.0 74.4 64.6 54.9 47.2 52.8

TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1895	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1896	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1897	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1898	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1899	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1900	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1901	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1902	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1903	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1904	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1905	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1906	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1907	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1908	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1909	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1910	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1911	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1912	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1913	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1914	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1915	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1916	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1917	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1918	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1919	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
1920	3.66	3.16	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.44
MEAN	3.37	3.27	3.24	3.31	4.35	5.37	7.95	6.59	5.95	3.66	3.22	3.99	51.60

MEAN 3.37 3.27 3.24 3.31 4.35 5.37 7.95 6.59 5.95 3.66 3.22 3.99 51.60

HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
1895	0	0	0	0	0	0	0	0	0	0	0	0	0
1896	0	0	0	0	0	0	0	0	0	0	0	0	0
1897	0	0	0	0	0	0	0	0	0	0	0	0	0
1898	0	0	0	0	0	0	0	0	0	0	0	0	0
1899	0	0	0	0	0	0	0	0	0	0	0	0	0
1900	0	0	0	0	0	0	0	0	0	0	0	0	0
1901	0	0	0	0	0	0	0	0	0	0	0	0	0
1902	0	0	0	0	0	0	0	0	0	0	0	0	0
1903	0	0	0	0	0	0	0	0	0	0	0	0	0
1904	0	0	0	0	0	0	0	0	0	0	0	0	0
1905	0	0	0	0	0	0	0	0	0	0	0	0	0
1906	0	0	0	0	0	0	0	0	0	0	0	0	0
1907	0	0	0	0	0	0	0	0	0	0	0	0	0
1908	0	0	0	0	0	0	0	0	0	0	0	0	0
1909	0	0	0	0	0	0	0	0	0	0	0	0	0
1910	0	0	0	0	0	0	0	0	0	0	0	0	0
1911	0	0	0	0	0	0	0	0	0	0	0	0	0
1912	0	0	0	0	0	0	0	0	0	0	0	0	0
1913	0	0	0	0	0	0	0	0	0	0	0	0	0
1914	0	0	0	0	0	0	0	0	0	0	0	0	0
1915	0	0	0	0	0	0	0	0	0	0	0	0	0
1916	0	0	0	0	0	0	0	0	0	0	0	0	0
1917	0	0	0	0	0	0	0	0	0	0	0	0	0
1918	0	0	0	0	0	0	0	0	0	0	0	0	0
1919	0	0	0	0	0	0	0	0	0	0	0	0	0
1920	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M." indicates missing record; "P." denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

CHERRY POINT, NORTH CAROLINA

COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1895	3	0	3	3	13	170	413	388	416	75	21	0	1060
1896	3	0	3	3	3	14	369	351	433	345	3	2	1824
1897	0	1	76	37	36	362	486	423	349	0	2	2	1824
1898	0	4	24	0	18	368	511	470	290	170	1	3	1860
1899	35	7	12	87	193	373	445	416	284	101	23	0	1860
1900	3	0	12	81	234	394	319	450	313	143	13	0	1860
1901	5	0	12	81	234	394	319	450	313	143	13	0	1860
1902	3	0	12	81	234	394	319	450	313	143	13	0	1860
1903	3	1	104	131	420	482	337	480	406	104	11	0	2176
1904	3	1	104	131	420	482	337	480	406	104	11	0	2176
1905	0	1	38	58	20	279	208	440	0	90	14	2	2208
1906	0	7	7	151	288	386	445	335	0	33	17	16	1961
1907	0	0	0	0	0	0	0	0	0	0	0	0	0
1908	0	0	0	0	0	169	310	361	304	0	32	20	0
1909	0	0	0	3	76	262	382	358	301	321	158	17	0
1910	0	0	0	6	74	214	373	430	481	309	102	6	0
1911	0	6	48	33	100	319	308	476	332	34	40	0	2008
1912	0	6	48	33	100	319	308	476	332	34	40	0	2008
1913	0	6	48	33	100	319	308	476	332	34	40	0	2008
1914	0	6	48	33	100	319	308	476	332	34	40	0	2008
1915	0	6	48	33	100	319	308	476	332	34	40	0	2008
1916	0	6	48	33	100	319	308	476	332	34	40	0	2008
1917	0	6	48	33	100	319	308	476	332	34	40	0	2008
1918	0	6	48	33	100	319	308	476	332	34	40	0	2008
1919	0	6	48	33	100	319	308	476	332	34	40	0	2008
1920	0	6	48	33	100	319	308	476	332	34	40	0	2008
1921	0	6	48	33	100	319	308	476	332	34	40	0	2008
1922	0	6	48	33	100	319	308	476	332	34	40	0	2008
1923	0	6	48	33	100	319	308	476	332	34	40	0	2008
1924	0	6	48	33	100	319	308	476	332	34	40	0	2008
1925	0	6	48	33	100	319	308	476	332	34	40	0	2008
1926	0	6	48	33	100	319	308	476	332	34	40	0	2008
1927	0	6	48	33	100	319	308	476	332	34	40	0	2008
1928	0	6	48	33	100	319	308	476	332	34	40	0	2008
1929	0	6	48	33	100	319	308	476	332	34	40	0	2008
1930	0	6	48	33	100	319	308	476	332	34	40	0	2008
1931	0	6	48	33	100	319	308	476	332	34	40	0	2008
1932	0	6	48	33	100	319	308	476	332	34	40	0	2008
1933	0	6	48	33	100	319	308	476	332	34	40	0	2008
1934	0	6	48	33	100	319	308	476	332	34	40	0	2008
1935	0	6	48	33	100	319	308	476	332	34	40	0	2008
1936	0	6	48	33	100	319	308	476	332	34	40	0	2008
1937	0	6	48	33	100	319	308	476	332	34	40	0	2008
1938	0	6	48	33	100	319	308	476	332	34	40	0	2008
1939	0	6	48	33	100	319	308	476	332	34	40	0	2008
1940	0	6	48	33	100	319	308	476	332	34	40	0	2008
1941	0	6	48	33	100	319	308	476	332	34	40	0	2008
1942	0	6	48	33	100	319	308	476	332	34	40	0	2008
1943	0	6	48	33	100	319	308	476	332	34	40	0	2008
1944	0	6	48	33	100	319	308	476	332	34	40	0	2008
1945	0	6	48	33	100	319	308	476	332	34	40	0	2008
1946	0	6	48	33	100	319	308	476	332	34	40	0	2008
1947	0	6	48	33	100	319	308	476	332	34	40	0	2008
1948	0	6	48	33	100	319	308	476	332	34	40	0	2008
1949	0	6	48	33	100	319	308	476	332	34	40	0	2008
1950	0	6	48	33	100	319	308	476	332	34	40	0	2008
1951	0	6	48	33	100	319	308	476	332	34	40	0	2008
1952	0	6	48	33	100	319	308	476	332	34	40	0	2008
1953	0	6	48	33	100	319	308	476	332	34	40	0	2008
1954	0	6	48	33	100	319	308	476	332	34	40	0	2008
1955	0	6	48	33	100	319	308	476	332	34	40	0	2008
1956	0	6	48	33	100	319	308	476	332	34	40	0	2008
1957	0	6	48	33	100	319	308	476	332	34	40	0	2008
1958	0	6	48	33	100	319	308	476	332	34	40	0	2008
1959	0	6	48	33	100	319	308	476	332	34	40	0	2008
1960	0	6	48	33	100	319	308	476	332	34	40	0	2008
1961	0	6	48	33	100	319	308	476	332	34	40	0	2008
1962	0	6	48	33	100	319	308	476	332	34	40	0	2008
1963	0	6	48	33	100	319	308	476	332	34	40	0	2008
1964	0	6	48	33	100	319	308	476	332	34	40	0	2008
1965	0	6	48	33	100	319	308	476	332	34	40	0	2008
1966	0	6	48	33	100	319	308	476	332	34	40	0	2008
1967	0	6	48	33	100	319	308	476	332	34	40	0	2008
1968	0	6	48	33	100	319	308	476	332	34	40	0	2008
1969	0	6	48	33	100	319	308	476	332	34	40	0	2008
1970	0	6	48	33	100	319	308	476	332	34	40	0	2008
1971	0	6	48	33	100	319	308	476	332	34	40	0	2008
1972	0	6	48	33	100	319	308	476	332	34	40	0	2008
1973	0	6	48	33	100	319	308	476	332	34	40	0	2008
1974	0	6	48	33	100	319	308	476	332	34	40	0	2008
1975	0	6	48	33	100	319	308	476	332	34	40	0	2008
1976	0	6	48	33	100	319	308	476	332	34	40	0	2008
1977	0	6	48	33	100	319	308	476	332	34	40	0	2008
1978	0	6	48	33	100	319	308	476	332	34	40	0	2008
1979	0	6	48	33	100	319	308	476	332	34	40	0	2008
1980	0	6	48	33	100	319	308	476	332	34	40	0	2008
1981	0	6	48	33	100	319	308	476	332	34	40	0	2008
1982	0	6	48	33	100	319	308	476	332	34	40	0	2008
1983	0	6	48	33	100	319	308	476	332	34	40	0	2008
1984	0	6	48	33	100	319	308	476	332	34	40	0	2008
1985	0	6	48	33	100	319	308	476	332	34	40	0	2008
1986	0	6	48	33	100	319	308	476	332	34	40	0	2008
1987	0	6	48	33	100	319	308	476	332	34	40	0	2008
1988	0	6	48	33	100	319	308	476	332	34	40	0	2008
1989	0	6	48	33	100	319	308	476	332	34	40	0	2008
1990	0	6	48	33	100	319	308	476	332	34	40	0	2008
1991	0	6	48	33	100	319	308	476	332	34	40	0	2008
1992	0	6	48	33	100	319	308	476	332	34	40	0	2008
1993	0	6	48	33	100	319	308	476	332	34	40	0	2008
1994	0	6	48	33	100	319	308	476	332	34	40	0	2008
1995	0	6	48	33	100	319	308	476	332	34	40	0	2008
1996	0	6	48	33	100	319	308	476	332	34	40	0	2008
1997	0	6	48	33	100	319	308	476	332	34	40	0	2008
1998	0	6	48	33	100	319	308	476	332	34	40	0	2008
1999	0	6	48	33	100	319	308	476	332	34	40	0	2008
2000	0	6	48	33	100	319	308	476	332	34	40	0	2008
2001	0	6	48	33	100	319	308	476	332	34	40	0	2008
2002	0	6	48	33	100	319	308	476	332	34	40	0	2008
2003	0	6	48	33	100	319	308	476	332	34	40	0	2008
2004	0	6	48	33	100	319	308	476	332	34	40	0	2008
2005	0	6	48	33	100	319	308	476	332	34	40	0	2008
2006	0	6	48	33	100	319	308	476	332	34	40	0	2008
2007	0	6	48	33	100	319	308	476	332	34	40	0	2008
2008	0	6	48	33	100	319	308	476	332	34	40	0	2008
2009	0	6											



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
13754		Cherry Point, North Carolina		34° 54' N		76° 53' W		29		KNKT		72309	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BLDG. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather office, 2nd deck North end of Bldg 199	MCAS	1952	1956	34° 54' N	76° 53' W	46	Mercurial	24				
2.	Weather office, 1st deck of Bldg 199	"	1956	1965	"	"	35	"	24				
3.	Mounted inside wall of observers room (replacement)	"	1965	1967	"	"	35	"	24				
4.	Observers room, building relocated	"	1967	1971	"	"	35	"	24				
5.	" " " "	"	1971		"	"	37	"	24				
1a.	Observers room, Bldg 199	"			"	"	37	Aneroid	24				
1b.	GMQ 14 Console Bldg 199	"	1961	1971	"	"	38	"	24				
1c.	" " " " relocated	"	1971	1974	"	"	38	"	24				
1d.	GMQ 29 Bldg 199	"	1974		"	"	38	"	24				

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.		Atop control tower	Selsyn		1. Barograph (aero-1932)
2.	1957 Re-placement	Atop control tower	UMQ-5C	RD-108	2. Auto met station (AN/GMQ-29) 3. Cloud height set (AN/GMQ-13B) 4. Theodolite (ML-474/GM) 5. Transmissometer (AN/GMQ-10C) 6. Radar (AN/FPS 106)
3.	1959	Two hundred yards from the intersection of runways 01 and 05	UMQ-5	RD-108	7. Weather vision (AN/GMQ-27(V)) 8. Precipitation Gauge (ML-217) 9. Altimeter control ind. (C-7826-F)
4.	1974				10. Wx data recorder (RO-379/GMH) 11. Radar FAX trans (T-1216/GMH 6 (V)) 12. Radar FAX recorder (RO-414/GMH 6 (V))

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

China Lake, California is located in the northern high Mojave Desert. Mountains of 5,000 to 10,000 feet rim the area.

China Lake's weather can be called typical of the high desert country with mostly clear skies prevailing throughout the year. The climate is semi-arid with precipitation averaging only 2 plus inches a year.

Flying weather is good throughout the year except for gusty surface winds causing turbulent conditions on landing and take off. Clear days average better than 20 days a month. Ceilings less than 5,000 feet occur only 3 to 6 days a year. Marginal flying conditions are experienced on the order of 6 days a year with half of these due to poor visibility in blowing dust and sand. The rest are due to lowered ceilings in conjunction with frontal precipitation.

Visibility is generally excellent with 50 to 100 miles being the rule in winter except for 2 or 3 days of 2 to 7 miles visibility in blowing dust or alkali which is transported into this valley when a strong north wind sets up after the passage of a fast moving cold front. Wind speeds over 20 knots frequently pick up loose sand but visibility seldom decreases to less than 10 miles.

Summer is characterized by very warm and dry days with cool

nights. Daytime temperatures rise to 100 degrees or higher an average of 60 days a year dropping to 60 to 70 degrees at night. The wind is usually calm during morning hours but with afternoon heating, southwesterly winds will begin to blow 10 to 20 knots. Clear skies dominate the hot summer months. With rapid surface ground heating, and an unstable lapse rate near the surface, dust devils can occur with winds to 30 knots in the vicinity of the phenomena.

Winters are cool with temperature dropping to less than 32 degrees at night about 60 days on the average and rises into the 50's during the day. Snow falls at China Lake on an average of once a year, usually only a trace is measured but every 2 or 3 years, accumulations to 4 inches can occur. Normally, frontal systems pass quickly through the station with an average speed of 25 knots. Occasionally strong westerly winds 20 to 35 knots can be sustained for periods up to 24 hours during the winter.

The strongest winds occur in the late winter and spring months with the passage of rapidly moving cold fronts. Occasionally quite dense dust or sand storms result. Light surface winds are the rule during the winter months. Although a moderate to strong northwesterly jet lies over the station producing significant winds over the southern Mojave Desert, a light southeasterly flow will occur over the station due to the surrounding mountainous topography.

CHINA LAKE, CALIFORNIA



STN LTRS: KNID  
WGAN # : 93106  
WMD # : 72386

WAP

FLYING NEA & HRS LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	01	3	4	4	3	3	2	2	2	3	3	6	3	19
LESS 5000	04	5	4	4	3	3	2	2	2	3	3	7	3	19
PT AND/OR	07	7	4	6	4	4	4	3	3	3	5	8	5	33
VISIBILITY	10	7	3	5	5	5	4	4	3	3	4	7	5	33
LESS 5 MI	13	7	3	6	5	5	3	4	3	3	5	6	5	33
	16	7	6	6	5	5	3	4	3	3	6	7	5	32
	19	6	4	5	5	5	2	3	3	4	6	7	5	28
	22	4	4	4	3	2	2	2	3	4	5	6	4	20
ALL HRS	6	5	4	5	4	4	3	3	3	3	5	7	4	27
CEILING	01	1	3	4	3	3	1	2	2	3	3	4	3	19
LESS 1000	04	2	3	4	3	3	2	2	2	3	4	5	3	19
PT AND/OR	07	5	4	5	4	5	3	4	2	3	3	5	4	33
VISIBILITY	10	3	3	5	4	5	3	4	2	3	3	4	4	33
LESS 3 MI	13	4	3	5	5	5	3	4	2	3	3	4	4	32
	16	4	4	5	5	3	2	4	2	3	4	5	3	28
	19	4	2	3	3	2	2	2	2	3	4	5	3	20
	22	4	3	4	4	4	3	3	2	3	5	4	4	27
ALL HRS	4	3	3	4	4	4	3	3	2	3	4	5	3	27
CEILING	01	1	3	4	3	3	1	2	2	3	3	4	3	19
LESS 600	04	2	4	5	3	3	2	2	2	3	4	5	3	19
PT AND/OR	07	5	3	5	4	5	3	4	2	3	3	5	4	33
VISIBILITY	10	3	3	5	4	5	3	4	2	3	3	4	4	33
LESS 2 MI	13	4	3	5	5	5	3	4	2	3	3	4	4	32
	16	4	4	5	5	3	2	4	2	3	4	5	3	28
	19	4	2	3	3	2	2	2	2	3	5	5	3	20
	22	4	3	4	4	4	3	3	2	3	5	4	3	27
ALL HRS	4	3	3	4	4	4	3	3	2	3	4	5	3	27
CEILING	01	1	3	4	3	3	1	2	2	3	3	4	3	19
LESS 500	04	2	4	5	3	3	2	2	2	3	4	5	3	19
PT AND/OR	07	5	3	5	4	5	3	4	2	3	3	5	4	33
VISIBILITY	10	3	3	5	4	5	3	4	2	3	3	4	4	33
LESS 1 MI	13	4	3	5	5	5	3	4	2	3	3	4	4	32
	16	4	4	5	5	3	2	4	2	3	4	5	3	28
	19	4	2	3	3	2	2	2	2	3	5	5	3	20
	22	4	3	4	4	4								



MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1946	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1947	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1948	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1949	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1950	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1951	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1952	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1953	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1954	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1955	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1956	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1957	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1958	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1959	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1960	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1961	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1962	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1963	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1964	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
1965	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6
MEAN	51.8	50.2	52.3	54.1	57.7	62.7	67.7	72.2	75.2	76.1	71.7	62.8	62.6

TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1946	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1947	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1949	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1950	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1951	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1952	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1953	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1954	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1955	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1956	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1957	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1958	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1959	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1960	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1961	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1962	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1963	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1964	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1965	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MEAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
44-45	0	0	0	0	0	0	0	0	0	0	0	0	0
45-46	0	0	0	0	0	0	0	0	0	0	0	0	0
46-47	0	0	0	0	0	0	0	0	0	0	0	0	0
47-48	0	0	0	0	0	0	0	0	0	0	0	0	0
48-49	0	0	0	0	0	0	0	0	0	0	0	0	0
49-50	0	0	0	0	0	0	0	0	0	0	0	0	0
50-51	0	0	0	0	0	0	0	0	0	0	0	0	0
51-52	0	0	0	0	0	0	0	0	0	0	0	0	0
52-53	0	0	0	0	0	0	0	0	0	0	0	0	0
53-54	0	0	0	0	0	0	0	0	0	0	0	0	0
54-55	0	0	0	0	0	0	0	0	0	0	0	0	0
55-56	0	0	0	0	0	0	0	0	0	0	0	0	0
56-57	0	0	0	0	0	0	0	0	0	0	0	0	0
57-58	0	0	0	0	0	0	0	0	0	0	0	0	0
58-59	0	0	0	0	0	0	0	0	0	0	0	0	0
59-60	0	0	0	0	0	0	0	0	0	0	0	0	0
60-61	0	0	0	0	0	0	0	0	0	0	0	0	0
61-62	0	0	0	0	0	0	0	0	0	0	0	0	0
62-63	0	0	0	0	0	0	0	0	0	0	0	0	0
63-64	0	0	0	0	0	0	0	0	0	0	0	0	0
64-65	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1945	0	0	0	0	0	0	0	0	0	0	0	0	0
1946	0	0	0	0	0	0	0	0	0	0	0	0	0
1947	0	0	0	0	0	0	0	0	0	0	0	0	0
1948	0	0	0	0	0	0	0	0	0	0	0	0	0
1949	0	0	0	0	0	0	0	0	0	0	0	0	0
1950	0	0	0	0	0	0	0	0	0	0	0	0	0
1951	0	0	0	0	0	0	0	0	0	0	0	0	0
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	0	0	0	0	0	0	0	0	0	0	0	0	0
1954	0	0	0	0	0	0	0	0	0	0	0	0	0
1955	0	0	0	0	0	0	0	0	0	0	0	0	0
1956	0	0	0	0	0	0	0	0	0	0	0	0	0
1957	0	0	0	0	0	0	0	0	0	0	0	0	0
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	0	0	0	0	0	0	0	0	0	0	0
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.  
 "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.  
 Partial monthly values were not included in means.

CHINA LAKE, CALIFORNIA



STATION NO ON SUMMARY		STATION NAME	LATITUDE:		LONGITUDE:		STATION ELEV. (FT)	CALL SIGN	WMO NUMBER
93104		China Lake, California	35°41'N		117°41'W		2283	KNID	72384

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather service office, second deck of hangar #1	Navy	1945	1958	35°41'N	117°41'W	2234	Mercurial	
2.	Weather service office	"	1958	1959	"	"	2233	"	
3.	Relocated Weather service office	"	1959	1969	"	"	2238	"	
4.	" " "	"	1969		"	"	"	"	
1a.	Weather service office	"	1964		"	"	"	Aneroid	

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1949	Roof of hangar #1	Double register Selsyn		68'	1. Barograph
1a.	1949	Roof of control tower		Triple	86'	2. Hygrothermograph
2a.	1958	Roof of control tower (replacement for selsyn)	UMQ-5	RD-108	86'	3. Theodolite
3a.	1959	Five hundred feet from the apex of runways 21 and 14	UMQ-5	RRD-108	18'	4. Thermoscreen
						5. Maximum and minimum thermometer
						6. Digital thermometer

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Corpus Christi, Texas is located on a peninsula approximately 10 miles southeast of downtown Corpus Christi. The terrain surrounding the Naval Air Station is flat. Water surrounds the station on three sides. The local area within 40 miles of the station is flat with an average height of 60 feet. Field elevation is 19 feet.

Local climate is characteristic of the Gulf Coast with short mild winters and hot humid summers. The transition to the winter months occurs in November. January is normally the coldest month. The temperature range during April through October is relatively small due to the modifying effects of the water.

The major obstruction to visibility is fog with the greatest occurrence during the winter months. Precipitation averages 29 inches annually with peak rainfall during September.

The prevailing wind is from the southeast. There is a distinct sea breeze effect increasing the synoptic wind speed approximately 10 knots. The land breeze is normally restricted to winter months with a very light pressure gradient.

Flying weather is excellent at the station. During the months of December through April, Visual Flight Rules (VFR) average 79% of the time. For other months VFR conditions exist 96% of the time.

Severe tropical storms or hurricanes average about one every ten years, storms of lesser strength about one every five years. The tropical storm season is from 1 June to 30 November with primary months of occurrence being August and September. Normally the storms entering the Gulf of Mexico from the Caribbean Sea are the strongest.

The station is normally under the influence of maritime tropical air masses with changes of air masses occurring as early as mid-September and as late as the last part of May. During the months of October, November, March, and April both maritime polar and continental polar fronts move across the area. During winter months fronts are either continental polar or arctic. Arctic fronts are mostly confined to January or early February. Arctic fronts are very slow clearing after passage, as they usually become stationary just south of Brownsville, with warm air overrunning the cold air causing extensive periods of low ceilings and visibility.

CORPUS CHRISTI, TEXAS



STN LTRS: KNGP  
WBAN # : 12926  
WMO # : 72251

**WFO**

MEAN NUMBER OF DAYS OCCURRENCE OF I

[illegible]

FLYING HRA %	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVA
CEILING	00	37	42	48	39	15	7	9	8	10	24	33	25	32
LESS 5000	03	41	49	53	42	19	4	5	14	16	27	36	30	32
PT AND/OR	06	51	54	54	50	21	6	10	18	18	31	39	38	32
VISIBILITY	09	50	54	54	50	40	23	23	26	21	33	41	38	32
LESS 5 MI	12	45	41	45	44	33	16	13	22	22	30	36	32	32
	15	36	29	31	34	23	19	9	15	15	22	30	24	32
	18	34	28	30	32	22	6	5	7	11	21	31	21	32
	21	34	33	39	34	14	3	4	7	11	22	29	22	32
ALL HRS	43	38	40	44	39	23	9	10	15	15	26	34	28	32
CEILING	00	18	25	31	17	3	0	1	2	3	8	15	12	32
LESS 1000	03	21	27	33	19	3	0	1	3	4	10	18	14	32
PT AND/OR	06	31	27	30	12	3	0	1	4	5	13	20	14	32
VISIBILITY	09	29	23	25	9	3	1	2	4	6	13	19	13	32
LESS 3 MI	12	22	14	11	5	1	1	3	4	6	8	14	8	32
	15	17	8	8	4	1	2	2	2	3	7	12	7	32
	18	14	12	16	9	1	2	2	2	2	6	13	6	32
	21	20	15	26	13	2	1	2	2	2	7	13	10	32
ALL HRS	24	19	19	22	11	2	1	2	3	3	9	15	11	32
CEILING	00	8	9	6	1	0	0	1	0	0	1	5	3	32
LESS 500	03	13	11	7	1	0	0	1	0	0	2	7	4	32
PT AND/OR	06	14	11	6	1	0	0	0	0	1	3	7	4	32
VISIBILITY	09	11	6	2	0	1	1	1	0	0	3	6	3	32
LESS 1 MI	12	3	1	1	0	1	1	1	0	0	1	3	1	32
	15	2	1	0	0	1	1	1	0	0	1	2	1	32
	18	3	2	1	0	0	1	2	0	0	1	2	2	32
	21	3	2	4	0	0	1	2	0	0	0	4	3	32
ALL HRS	9	6	6	3	1	0	1	1	0	0	1	5	3	32
CEILING	00	5	3	1	0	0	0	1	0	0	0	2	1	32
LESS 100	03	6	3	2	0	0	0	0	0	0	0	3	2	32
PT AND/OR	06	6	3	1	1	0	0	0	0	0	1	3	2	32
VISIBILITY	09	3	0	0	0	0	1	1	0	0	1	3	1	32
LESS 1/4 MI	12	1	0	0	0	0	1	1	0	0	0	1	1	32
	15	0	0	0	0	1	1	1	0	0	0	1	1	32
	18	1												



# MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1944	58.1	60.3	67.8	72.5	77.8	81.9	83.5	82.9	81.4	78.5	75.6	71.1	76.5
1945	58.4	60.6	68.1	72.8	78.1	82.2	83.8	83.2	81.7	78.8	75.9	71.4	76.8
1946	58.5	60.7	68.2	72.9	78.2	82.3	83.9	83.3	81.8	78.9	76.0	71.5	76.9
1947	58.6	60.8	68.3	73.0	78.3	82.4	84.0	83.4	81.9	79.0	76.1	71.6	77.0
1948	58.7	60.9	68.4	73.1	78.4	82.5	84.1	83.5	82.0	79.1	76.2	71.7	77.1
1949	58.8	61.0	68.5	73.2	78.5	82.6	84.2	83.6	82.1	79.2	76.3	71.8	77.2
1950	58.9	61.1	68.6	73.3	78.6	82.7	84.3	83.7	82.2	79.3	76.4	71.9	77.3
1951	59.0	61.2	68.7	73.4	78.7	82.8	84.4	83.8	82.3	79.4	76.5	72.0	77.4
1952	59.1	61.3	68.8	73.5	78.8	82.9	84.5	83.9	82.4	79.5	76.6	72.1	77.5
1953	59.2	61.4	68.9	73.6	78.9	83.0	84.6	84.0	82.5	79.6	76.7	72.2	77.6
1954	59.3	61.5	69.0	73.7	79.0	83.1	84.7	84.1	82.6	79.7	76.8	72.3	77.7
1955	59.4	61.6	69.1	73.8	79.1	83.2	84.8	84.2	82.7	79.8	76.9	72.4	77.8
1956	59.5	61.7	69.2	73.9	79.2	83.3	84.9	84.3	82.8	79.9	77.0	72.5	77.9
1957	59.6	61.8	69.3	74.0	79.3	83.4	85.0	84.4	82.9	80.0	77.1	72.6	78.0
1958	59.7	61.9	69.4	74.1	79.4	83.5	85.1	84.5	83.0	80.1	77.2	72.7	78.1
1959	59.8	62.0	69.5	74.2	79.5	83.6	85.2	84.6	83.1	80.2	77.3	72.8	78.2
1960	59.9	62.1	69.6	74.3	79.6	83.7	85.3	84.7	83.2	80.3	77.4	72.9	78.3
1961	60.0	62.2	69.7	74.4	79.7	83.8	85.4	84.8	83.3	80.4	77.5	73.0	78.4
1962	60.1	62.3	69.8	74.5	79.8	83.9	85.5	84.9	83.4	80.5	77.6	73.1	78.5
1963	60.2	62.4	69.9	74.6	79.9	84.0	85.6	85.0	83.5	80.6	77.7	73.2	78.6
1964	60.3	62.5	70.0	74.7	80.0	84.1	85.7	85.1	83.6	80.7	77.8	73.3	78.7
1965	60.4	62.6	70.1	74.8	80.1	84.2	85.8	85.2	83.7	80.8	77.9	73.4	78.8
1966	60.5	62.7	70.2	74.9	80.2	84.3	85.9	85.3	83.8	80.9	78.0	73.5	78.9
1967	60.6	62.8	70.3	75.0	80.3	84.4	86.0	85.4	83.9	81.0	78.1	73.6	79.0
1968	60.7	62.9	70.4	75.1	80.4	84.5	86.1	85.5	84.0	81.1	78.2	73.7	79.1
1969	60.8	63.0	70.5	75.2	80.5	84.6	86.2	85.6	84.1	81.2	78.3	73.8	79.2
1970	60.9	63.1	70.6	75.3	80.6	84.7	86.3	85.7	84.2	81.3	78.4	73.9	79.3
1971	61.0	63.2	70.7	75.4	80.7	84.8	86.4	85.8	84.3	81.4	78.5	74.0	79.4
1972	61.1	63.3	70.8	75.5	80.8	84.9	86.5	85.9	84.4	81.5	78.6	74.1	79.5
1973	61.2	63.4	70.9	75.6	80.9	85.0	86.6	86.0	84.5	81.6	78.7	74.2	79.6
1974	61.3	63.5	71.0	75.7	81.0	85.1	86.7	86.1	84.6	81.7	78.8	74.3	79.7
1975	61.4	63.6	71.1	75.8	81.1	85.2	86.8	86.2	84.7	81.8	78.9	74.4	79.8
1976	61.5	63.7	71.2	75.9	81.2	85.3	86.9	86.3	84.8	81.9	79.0	74.5	79.9
1977	61.6	63.8	71.3	76.0	81.3	85.4	87.0	86.4	84.9	82.0	79.1	74.6	80.0
1978	61.7	63.9	71.4	76.1	81.4	85.5	87.1	86.5	85.0	82.1	79.2	74.7	80.1
1979	61.8	64.0	71.5	76.2	81.5	85.6	87.2	86.6	85.1	82.2	79.3	74.8	80.2
1980	61.9	64.1	71.6	76.3	81.6	85.7	87.3	86.7	85.2	82.3	79.4	74.9	80.3
1981	62.0	64.2	71.7	76.4	81.7	85.8	87.4	86.8	85.3	82.4	79.5	75.0	80.4
1982	62.1	64.3	71.8	76.5	81.8	85.9	87.5	86.9	85.4	82.5	79.6	75.1	80.5
1983	62.2	64.4	71.9	76.6	81.9	86.0	87.6	87.0	85.5	82.6	79.7	75.2	80.6
1984	62.3	64.5	72.0	76.7	82.0	86.1	87.7	87.1	85.6	82.7	79.8	75.3	80.7
1985	62.4	64.6	72.1	76.8	82.1	86.2	87.8	87.2	85.7	82.8	79.9	75.4	80.8
1986	62.5	64.7	72.2	76.9	82.2	86.3	87.9	87.3	85.8	82.9	80.0	75.5	80.9
1987	62.6	64.8	72.3	77.0	82.3	86.4	88.0	87.4	85.9	83.0	80.1	75.6	81.0
1988	62.7	64.9	72.4	77.1	82.4	86.5	88.1	87.5	86.0	83.1	80.2	75.7	81.1
1989	62.8	65.0	72.5	77.2	82.5	86.6	88.2	87.6	86.1	83.2	80.3	75.8	81.2
1990	62.9	65.1	72.6	77.3	82.6	86.7	88.3	87.7	86.2	83.3	80.4	75.9	81.3
1991	63.0	65.2	72.7	77.4	82.7	86.8	88.4	87.8	86.3	83.4	80.5	76.0	81.4
1992	63.1	65.3	72.8	77.5	82.8	86.9	88.5	87.9	86.4	83.5	80.6	76.1	81.5
1993	63.2	65.4	72.9	77.6	82.9	87.0	88.6	88.0	86.5	83.6	80.7	76.2	81.6
1994	63.3	65.5	73.0	77.7	83.0	87.1	88.7	88.1	86.6	83.7	80.8	76.3	81.7
1995	63.4	65.6	73.1	77.8	83.1	87.2	88.8	88.2	86.7	83.8	80.9	76.4	81.8
1996	63.5	65.7	73.2	77.9	83.2	87.3	88.9	88.3	86.8	83.9	81.0	76.5	81.9
1997	63.6	65.8	73.3	78.0	83.3	87.4	89.0	88.4	86.9	84.0	81.1	76.6	82.0
1998	63.7	65.9	73.4	78.1	83.4	87.5	89.1	88.5	87.0	84.1	81.2	76.7	82.1
1999	63.8	66.0	73.5	78.2	83.5	87.6	89.2	88.6	87.1	84.2	81.3	76.8	82.2
2000	63.9	66.1	73.6	78.3	83.6	87.7	89.3	88.7	87.2	84.3	81.4	76.9	82.3
2001	64.0	66.2	73.7	78.4	83.7	87.8	89.4	88.8	87.3	84.4	81.5	77.0	82.4
2002	64.1	66.3	73.8	78.5	83.8	87.9	89.5	88.9	87.4	84.5	81.6	77.1	82.5
2003	64.2	66.4	73.9	78.6	83.9	88.0	89.6	89.0	87.5	84.6	81.7	77.2	82.6
2004	64.3	66.5	74.0	78.7	84.0	88.1	89.7	89.1	87.6	84.7	81.8	77.3	82.7
2005	64.4	66.6	74.1	78.8	84.1	88.2	89.8	89.2	87.7	84.8	81.9	77.4	82.8
2006	64.5	66.7	74.2	78.9	84.2	88.3	89.9	89.3	87.8	84.9	82.0	77.5	82.9
2007	64.6	66.8	74.3	79.0	84.3	88.4	90.0	89.4	87.9	85.0	82.1	77.6	83.0
2008	64.7	66.9	74.4	79.1	84.4	88.5	90.1	89.5	88.0	85.1	82.2	77.7	83.1
2009	64.8	67.0	74.5	79.2	84.5	88.6	90.2	89.6	88.1	85.2	82.3	77.8	83.2
2010	64.9	67.1	74.6	79.3	84.6	88.7	90.3	89.7	88.2	85.3	82.4	77.9	83.3
2011	65.0	67.2	74.7	79.4	84.7	88.8	90.4	89.8	88.3	85.4	82.5	78.0	83.4
2012	65.1	67.3	74.8	79.5	84.8	88.9	90.5	89.9	88.4	85.5	82.6	78.1	83.5
2013	65.2	67.4	74.9	79.6	84.9	89.0	90.6	90.0	88.5	85.6	82.7	78.2	83.6
2014	65.3	67.5	75.0	79.7	85.0	89.1	90.7	90.1	88.6	85.7	82.8	78.3	83.7
2015	65.4	67.6	75.1	79.8	85.1	89.2	90.8	90.2	88.7	85.8	82.9	78.4	83.8
2016	65.5	67.7	75.2	79.9	85.2	89.3	90.9	90.3	88.8	85.9	83.0	78.5	83.9
2017	65.6	67.8	75.3	80.0	85.3	89.4	91.0	90.4	88.9	86.0	83.1	78.6	84.0
2018	65.7	67.9	75.4	80.1	85.4	89.5	91.1	90.5	89.0	86.1	83.2	78.7	84.1
2019	65.8	68.0	75.5	80.2	85.5	89.6	91.2	90.6	89.1	86.2	83.3	78.8	84.2
2020	65.9	68.1	75.6	80.3	85.6	89.7	91.3	90.7	89.2	86.3	83.4	78.9	84.3
2021	66.0	68.2	75.7	80.4	85.7	89.8	91.4	90.8	89.3	86.4	83.5	79.0	84.4
2022	66.1	68.3	75.8	80.5	85.8	89.9	91.5	90.9	89.4	86.5	83.6	79.1	84.5
2023	66.2	68.4	75.9	80.6	85.9	90.0	91.6	91.0	89.5	86.6	83.7	79.2	84.6
2024	66.3	68.5	76.0	80.7	86.0	90.1	91.7	91.1	89.6	86.7	83.8	79.3	84.7
2025	66.4	68.6	76.1	80.8	86.1	90.2	91.8	91.2	89.7	86.8	83.9	79.4	84.8
2026	66.5	68.7	76.2	80.9	86.2	90.3	91.9	91.3	89.8	86.9	84.0	79.5	84.9
2027	66.6	68.8	76.3	81.0	86.3	90.4	92.0	91.4	89.9	87.0	84.1	79.6	85.0
2028	66.7	68.9	76.4	81.1	86.4	90.5	92.1	91.5	90.0	87.1	84.2	79.7	85.1
2029	66.8	69.0	76.5	81.2	86.5	90.6	92.2	91.6	90.1	87.2	84.3	79.8	85.2
2030	66.9	69.1	76.6	81.3	86.6	90.7	92.3	91.7	90.2	87.3	84.4	79.9	85.3
2031	67.0	69.2	76.7	81.4	86.7	90.8	92.4	91.8	90.3	87.4	84.5	80.0	85.4
2032	67.1	69.3	76.8	81.5	86.8	90.9	92.5	91.9	90.4	87.5	84.6	80.1	85.5
2033	67.2	69.4	76.9	81.6	86.9	91.0	92.6	92.0	90.5	87.6	84.7	80.2	85.6
2034	67.3	69.5	77.0	81.7	87.0	91.1	92.7	92.1	90.6	87.7	84.8	80.3	85.7
2035	67.4	69.6	77.1	81.8	87.1	91.2	92.8	92.2	90.7	87.8	84.9	80.4	85.8
2036	67.5	69.7	77.2	81.9	87.2	91.3	92.9						



STATION NO ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT)		CALL SIGN		WMO NUMBER	
12926		Corpus Christi, Texas		27°41'N		97°17'W		16		KNGP		72251	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF PART LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, lower deck hangar # 58	Navy	1945	1960	27°41'N	97°17'W	34	Mercurial	24				
2.	Weather service office, main deck hangar #58	"	1960	1970	"	"	19	"	24				
3.	Weather service office, main deck hangar # 58	"	1970	1976	"	"	Above Grd 19	"	24				
1a.	Weather service office, main deck hangar # 58	"	1970		"	"	Above Grd Aneroid 21		24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
*1.	1949	Atop control tower roof	Selsyn	Double register	* Date equipment surveyed unknown 1. Marine barograph 2. Auto Met station (AN/GMQ-29) 3. Cloud height set (AN/GMQ-13) 4. Transmissometer (AN/GMQ-10C) 5. Radar (AN/FPS-106) 6. Weather vision (AN/GMQ-27) 7. GOES (9271 Alden) 8. Radar remote system (AN/GMH-6(V))
*1a.	1949	Atop hangar # 58	3 cup	90'	
1b.	1954	Atop control tower roof	UMQ-5C	RD-108	
2b.	1961	Between runway 13R-31L and taxiway Yankee, 5300 feet west northwest of the operations building, hangar 58	UMQ-5C	RD-108	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Cubi Point, Republic of the Philippines, is located on the southeast shore of Subic Bay on the west coast of the island of Luzon. Subic Bay is about 5 miles wide and 10 miles long and opens to the southwest. Mountainous terrain on the remaining sides range up to 4,200 feet.

The Philippine Islands are dominated by the northeast monsoon during the winter months and by the southwest monsoon during the summer. The northeast monsoon winds first appear over the Philippines by mid-October and last until mid-June. The southwest monsoon is dominant during the months of August and September although southerly winds are also common in June and July. The air flow of the summer months is not nearly as consistent in speed or direction as the easterly winds of winter and spring. This variation is due to the position of the Philippines near the eastern edge of the southwest monsoon influence.

The combined effects of topography and seasonal variation in wind flow produce distinct rainfall regions in the Philippines.

Cubi Point has a single rainy season beginning in the latter part of May or early June and continuing through October. Most of the rainfall occurs during the months of July, August and September with a decided maximum in August. Monthly totals in excess of 40 inches are not uncommon.

The months of the highest incidence of thunderstorms at Cubi Point are May through October. During periods of strong southwest monsoonal flow, thunderstorms are difficult to detect visually because

they will be imbedded in the low overcast and masked by the almost continuous rain.

The mean annual temperature at Cubi Point averages in the low 80's. The mean monthly temperatures show little change from this figure. The coldest temperatures occur during January and February during the surges of modified maritime polar air of the northeast monsoon.

Low visibilities, i.e. "less than 6 miles" are almost exclusively a function of the rainfall pattern at Cubi Point. The heavy showers of the rainy season often cause the visibility to drop below 3 miles and occasionally as low as 1/16 of a mile.

Subic Bay is a well-protected harbor with a narrow opening to the southwest. Seas do not get a chance to build to any significant height with a limited fetch of only 10 miles. One to three feet is usually the rule during the northeast monsoon and 3 to 5 feet during the southwest monsoon. During the northeast monsoon season, a sea breeze can be expected when the winds at 2,000 feet are less than 20 knots. The sea breeze usually sets in from the southwest around 1300 local time. The weaker the gradient wind the earlier the occurrence, sometimes commencing by 1000.

Typhoons are the most severe type of weather that affects the Philippine area; although, relatively few have any direct effect on the Cubi Point weather. The greatest threat to the Subic Bay area comes from tropical cyclones that develop in late September through early December. Many of these will pass directly over the island without recurvature.

CUBI POINT, PHILIPPINES



PREPARED BY: NWSO ASHEVILLE  
JUNE 1978

STATION NAME: CUBI POINT, PHILIPPINES  
LOCATION: 1 N16 47 E120 16

PERIOD: OCT 55-DEC 77  
ELEV: 55

STN LTRS: RPHB  
MBAN # 1 41231  
MMO # 1 98426

TEMPERATURE		DEG F		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUM		WINDS		SPEED		PRESS		ALT		PULG		CLD		MEAN		PRECIP		SNOWFALL		NY		MAX		MIN	
DAILY		MEAN		EXTREMES		H		M		N		Y		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN	
JAN		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
FEB		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
MAR		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
APR		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
MAY		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
JUN		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
JUL		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
AUG		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
SEP		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
OCT		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
NOV		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
DEC		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
ANN		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	
EVR		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64		72		80		64	

FLYING HFA & HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
CEILING		02	5	3	5	4	4	5	12	1	1	25	32	38	2	2	1	1	0	0	7	3	5	13	20				
LESS 5000		05	5	2	3	4	3	3	10	1	1	21	30	34	2	4	2	1	0	0	7	4	6	15	20				
PT AND/OR		08	7	4	7	4	3	6	8	1	1	23	31	27	3	4	3	3	0	0	8	8	10	13	22				
VISIBILITY		11	8	4	5	5	6	13	13	2	2	26	37	40	27	4	27	3	0	0	14	18	23	22					
LESS 5 MI		14	19	15	13	13	12	11	16	15	16	28	37	43	30	36	30	4	1	22	15	15	23	22					
		17	16	15	11	11	11	16	18	17	18	28	37	43	37	45	43	31	16	16	18	22	23	22					
		20	19	8	7	7	6	15	15	15	17	30	38	45	31	31	31	29	15	15	18	17	18	21					
		23	9	4	6	7	6	17	17	17	32	32	42	42	31	42	31	29	15	15	17	17	17	21					
ALL HRS		9	9	7	7	7	7	7	14	14	14	25	33	40	2	2	2	1	0	14	9	9	9	17	21				
CEILING		02	0	0	0	0	0	0	1	1	1	1	2	2	2	2	1	1	0	0	0	0	0	1	20				
LESS 1000		05	0	0	0	0	0	0	1	1	1	1	2	2	2	4	1	1	0	0	0	0	0	1	20				
PT AND/OR		08	0	0	0	0	0	0	1	1	1	3	3	3	3	4	2	3	0	1	0	0	0	1	20				
VISIBILITY		11	0	0	0	0	0	0	1	1	1	3	3	3	3	4	3	3	0	0	0	0	0	1	22				
LESS 3 MI		14	0	0	0	0	0	0	2	2	2	2	4	5	5	5	4	4	0	1	1	1	2	1	22				
		17	0	0	0	0	0	0	1	1	1	2	2	2	2	3	2	2	0	0	0	0	0	1	21				
		20	0	0	0	0	0	0	1	1	1	2	3	3	3	3	2	2	0	0	0	0	0	1	21				
		23	0	0	0	0	0	0	1	1	1	2	3	3	3	3	2	2	0	0	0	0	0	1	21				
ALL HRS		0	0	0	0	0	0	0	1	1	1	2	3	3	3	3	3	2	0	0	0	0	0	1	21				
CEILING		02	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20				
LESS 500		05	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	20				
PT AND/OR		08	0	0	0	0	0	0	1	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	20				
VISIBILITY		11	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	22				
LESS 2 MI		14	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	22				
		17	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	22				
		20	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	21				
		23	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	21				
ALL HRS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21				
CEILING		02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20				
LESS 300		05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20				
PT AND/OR		08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22				
VISIBILITY		11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22				
LESS 3/4 MI		14	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	22				
		17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22				
		20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21				
		23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21				
ALL HRS		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21				



## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct	Nov.	Dec.	Total
1925	H	H	H	H	H	H	H	H	H	51.7	H	H	H
1926	H	H	H	H	H	H	H	H	H	H	H	H	H
1927	H	H	H	H	H	H	H	H	H	H	H	H	H
1928	435	449	551	506	613	575	551	643	696	519	497	476	6135
1929	465	481	584	586	613	555	585	682	748	498	521	488	5849
1930	488	491	644	615	619	559	609	670	680	498	511	510	6077
1931	495	507	521	576	647	557	473	509	446	450	485	486	6075
1932	497	507	560	584	619	555	550	609	619	498	509	509	6075
1933	507	507	560	584	619	555	550	609	619	498	509	509	6075
1934	528	544	616	599	642	555	510	644	515	524	482	524	6436
1935	539	554	625	579	649	559	549	649	559	549	549	549	6499
1936	549	559	625	579	649	559	549	649	559	549	549	549	6499
1937	549	559	625	579	649	559	549	649	559	549	549	549	6499
1938	549	559	625	579	649	559	549	649	559	549	549	549	6499
1939	549	559	625	579	649	559	549	649	559	549	549	549	6499
1940	549	559	625	579	649	559	549	649	559	549	549	549	6499
1941	549	559	625	579	649	559	549	649	559	549	549	549	6499
1942	549	559	625	579	649	559	549	649	559	549	549	549	6499
1943	549	559	625	579	649	559	549	649	559	549	549	549	6499
1944	549	559	625	579	649	559	549	649	559	549	549	549	6499
1945	549	559	625	579	649	559	549	649	559	549	549	549	6499
1946	549	559	625	579	649	559	549	649	559	549	549	549	6499
1947	549	559	625	579	649	559	549	649	559	549	549	549	6499
1948	549	559	625	579	649	559	549	649	559	549	549	549	6499
1949	549	559	625	579	649	559	549	649	559	549	549	549	6499
1950	549	559	625	579	649	559	549	649	559	549	549	549	6499
1951	549	559	625	579	649	559	549	649	559	549	549	549	6499
1952	549	559	625	579	649	559	549	649	559	549	549	549	6499
1953	549	559	625	579	649	559	549	649	559	549	549	549	6499
1954	549	559	625	579	649	559	549	649	559	549	549	549	6499
1955	549	559	625	579	649	559	549	649	559	549	549	549	6499
1956	549	559	625	579	649	559	549	649	559	549	549	549	6499
1957	549	559	625	579	649	559	549	649	559	549	549	549	6499
1958	549	559	625	579	649	559	549	649	559	549	549	549	6499
1959	549	559	625	579	649	559	549	649	559	549	549	549	6499
1960	549	559	625	579	649	559	549	649	559	549	549	549	6499
1961	549	559	625	579	649	559	549	649	559	549	549	549	6499
1962	549	559	625	579	649	559	549	649	559	549	549	549	6499
1963	549	559	625	579	649	559	549	649	559	549	549	549	6499
1964	549	559	625	579	649	559	549	649	559	549	549	549	6499
1965	549	559	625	579	649	559	549	649	559	549	549	549	6499
1966	549	559	625	579	649	559	549	649	559	549	549	549	6499
1967	549	559	625	579	649	559	549	649	559	549	549	549	6499
1968	549	559	625	579	649	559	549	649	559	549	549	549	6499
1969	549	559	625	579	649	559	549	649	559	549	549	549	6499
1970	549	559	625	579	649	559	549	649	559	549	549	549	6499
1971	549	559	625	579	649	559	549	649	559	549	549	549	6499
1972	549	559	625	579	649	559	549	649	559	549	549	549	6499
1973	549	559	625	579	649	559	549	649	559	549	549	549	6499
1974	549	559	625	579	649	559	549	649	559	549	549	549	6499
1975	549	559	625	579	649	559	549	649	559	549	549	549	6499
1976	549	559	625	579	649	559	549	649	559	549	549	549	6499
1977	549	559	625	579	649	559	549	649	559	549	549	549	6499
1978	549	559	625	579	649	559	549	649	559	549	549	549	6499
1979	549	559	625	579	649	559	549	649	559	549	549	549	6499
1980	549	559	625	579	649	559	549	649	559	549	549	549	6499
1981	549	559	625	579	649	559	549	649	559	549	549	549	6499
1982	549	559	625	579	649	559	549	649	559	549	549	549	6499
1983	549	559	625	579	649	559	549	649	559	549	549	549	6499
1984	549	559	625	579	649	559	549	649	559	549	549	549	6499
1985	549	559	625	579	649	559	549	649	559	549	549	549	6499
1986	549	559	625	579	649	559	549	649	559	549	549	549	6499
1987	549	559	625	579	649	559	549	649	559	549	549	549	6499
1988	549	559	625	579	649	559	549	649	559	549	549	549	6499
1989	549	559	625	579	649	559	549	649	559	549	549	549	6499
1990	549	559	625	579	649	559	549	649	559	549	549	549	6499
1991	549	559	625	579	649	559	549	649	559	549	549	549	6499
1992	549	559	625	579	649	559	549	649	559	549	549	549	6499
1993	549	559	625	579	649	559	549	649	559	549	549	549	6499
1994	549	559	625	579	649	559	549	649	559	549	549	549	6499
1995	549	559	625	579	649	559	549	649	559	549	549	549	6499
1996	549	559	625	579	649	559	549	649	559	549	549	549	6499
1997	549	559	625	579	649	559	549	649	559	549	549	549	6499
1998	549	559	625	579	649	559	549	649	559	549	549	549	6499
1999	549	559	625	579	649	559	549	649	559	549	549	549	6499
2000	549	559	625	579	649	559	549	649	559	549	549	549	6499
2001	549	559	625	579	649	559	549	649	559	549	549	549	6499
2002	549	559	625	579	649	559	549	649	559	549	549	549	6499
2003	549	559	625	579	649	559	549	649	559	549	549	549	6499
2004	549	559	625	579	649	559	549	649	559	549	549	549	6499
2005	549	559	625	579	649	559	549	649	559	549	549	549	6499
2006	549	559	625	579	649	559	549	649	559	549	549	549	6499
2007	549	559	625	579	649	559	549	649	559	549	549	549	6499
2008	549	559	625	579	649	559	549	649	559	549	549	549	6499
2009	549	559	625	579	649	559	549	649	559	549	549	549	6499
2010	549	559	625	579	649	559	549	649	559	549	549	549	6499
2011	549	559	625	579	649	559	549	649	559	549	549	549	6499
2012	549	559	625	579	649	559	549	649	559	549	549	549	6499
2013	549	559	625	579	649	559	549	649	559	549	549	549	6499
2014	549	559	625	579	649	559	549	649	559	549	549	549	6499
2015	549	559	625	579	649	559	549	649	559	549	549	549	6499
2016	549	559	625	579	649	559	549	649	559	549	549	549	6499
2017	549	559	625	579	649	559	549	649	559	549	549	549	6499
2018	549	559	625	579	649	559	549	649	559	549	549	549	6499
2019	549	559	625	579	649	559	549	649	559	549	549	549	6499
2020	549	559	625	579	649	559	549	649	559	549	549	549	6499
2021	549	559	625	579	649	559	549	649	559	549	549	549	6499
2022	549	559	625	579	649	559	549	649	559	549	549	549	6499
2023	549	559	625	579	649	559	549	649	559	549	549	549	6499
2024	549	559	625	579	649	559	549	649	559	549	549	549	6499
2025	549	559	625	579	649	559	549	649	559	549	549	549	6499
2026	549	559	625	579	649	559	549	649	559	549	549	549	6499
2027	549	559	625	579	649	559	549	649	559	549	549	549	6499
2028	549	559	625	579	649	559	549	649	559	549	549	549	6499
2029	549	559	625	579	649	559	549	649	559	549	549	549	6499
2030	549												

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO. OR SUMMARY:	STATION NAME:	LATITUDE:	LONGITUDE:	STATION ELEV. (FT.)	CALL SIGN:	WMO NUMBER:
41231	Cubi Point, P. I.	14°47'N	120°16'E	55	RPMB	98426

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BANG LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather service office in operation building	USN	1956	1967	14°47'N	120°16'E	60.39	Mercurial	*Var
2.	Weather service office	"	1967	1970	"	"	60.40	"	24
3.	"	"	1970	1973	"	"	62	"	24
1a.	"	"	1956		"	"	62	Aneroid	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed 1955	On control tower with vane extending eight feet above tower roof	AN/UMQ-5	RD-108	10'	* Commenced 24-hour observation program June 1958. 1. Barograph (2645-43) 2. Semi-auto Met station(AN-GMQ-14B) 3. Ceiling light (ML-121) 4. Theodolite (ML-247) 5. Satellite Tracking Antenna (GKR-4) 6. Radar Set Meteorological (AN/FPS-106(V)1)
2.	1962	700 feet north of runway	AN/UMQ-5C	RD-108	7'	
3.	1972	Height change	"	"	12'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Dallas is located in North-Central Texas on the southwestern perimeter of Dallas, Texas. Mountain Creek Lake borders the southern perimeter of the station including the south end of the main runway.

When considering the climate of the Dallas area, one is impressed by the temperate mean conditions that prevail and the extremes that combine to produce those means. The mean annual temperature is 66.5 degrees F., normal annual precipitation totals almost 33 inches and a mean relative humidity of 65 percent, all support the temperate climate image. The wide range between maximum and minimum temperatures which is characteristic of the continental region to the north, extends into the Dallas area. Periods of extreme cold that occasionally occur are short lived. Likewise, the extremely high temperatures that sometimes occur in summer usually do not prevail for extended periods.

Dallas is located in a region where sudden changes in temperature and moisture occur in winter as cold dry polar air replaces warm moist tropical air and vice versa. Days with readings of 20 degrees F. or lower occur an average of six times a year. The high temperatures of summer are associated with fair skies, southwest-

erly winds and dry air conditions which prevail during the summer in the region to the west.

Rainy periods last usually for one or two days, followed by several days of fair weather. The greatest amounts of rain occur during the months of April, May, September, and October. Thunderstorms occur throughout the year, but are most frequent in the spring. Snowfall is unimportant as a source of moisture, a measurable fall occurring on an average of only once a year.

The prevailing surface winds are southerly at 9 knots. Strong winds from the north with gusts to 35 knots occur frequently during the colder months, but are of relatively short duration.

Flying weather is excellent with marginal flying (IFR) conditions averaging 5% of the time. The IFR conditions are normally associated with early morning stratus and fog which usually lifts or dissipates by 1000 local time. This condition is most prevalent during winter and early spring while under a southerly flow. Short periods of IFR conditions are also encountered throughout the year with thunderstorms and occasionally with blowing dust in the winter immediately after a frontal passage.

DALLAS, TEXAS



STN LTRS: KNBB  
WGAN # : 93901  
WMO # :

FLYING NEA & MRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	00	29	23	21	22	16	8	3	3	12	16	19	26	19	30
LESS 5000	03	33	30	30	32	24	14	3	3	13	20	25	30	22	30
PT ANG/DR	06	37	34	40	40	33	26	11	10	22	23	28	31	26	30
VISIBILITY	09	39	36	36	38	35	26	11	10	23	23	28	31	29	33
LESS 5 MI	12	36	32	32	33	28	19	13	11	24	18	23	25	28	33
	15	30	28	27	30	20	16	12	11	17	12	19	23	15	30
	18	27	22	21	17	14	7	4	4	10	12	18	23	14	30
	21	24	21	20	17	10	7	4	3	10	13	19	23	12	31
ALL MRS	24	32	28	28	31	23	16	8	8	17	19	24	28	22	31
CEILING	00	12	9	6	5	4	3	2	1	3	7	8	12	6	30
LESS 1000	03	16	13	8	7	7	3	2	2	9	8	11	14	9	30
PT ANG/DR	06	18	16	11	12	5	2	1	1	7	10	11	15	9	33
VISIBILITY	09	21	11	6	9	3	2	1	1	7	3	11	11	9	33
LESS 5 MI	12	14	11	5	4	3	2	1	1	2	3	6	9	4	33
	15	11	8	5	3	3	2	1	0	2	3	6	9	4	33
	18	11	7	4	3	3	2	1	0	2	3	6	9	4	33
	21	10	7	4	3	3	2	1	0	2	3	6	9	4	33
ALL MRS	24	14	10	7	6	4	2	1	1	5	6	8	12	6	31
CEILING	00	5	2	2	1	2	2	2	1	3	3	3	5	3	30
LESS 500	03	7	5	3	1	7	3	2	1	2	3	4	6	3	30
PT ANG/DR	06	7	5	4	2	10	5	1	0	2	3	4	6	3	30
VISIBILITY	09	9	5	4	2	11	7	1	0	2	3	4	6	3	33
LESS 1 MI	12	2	1	1	1	2	0	0	0	0	1	1	2	1	33
	15	2	1	1	1	2	0	0	0	0	1	1	2	1	33
	18	2	1	1	1	1	0	0	0	0	1	1	2	1	33
	21	3	2	2	1	1	1	1	0	0	2	2	3	2	30
ALL MRS	24	4	3	2	1	1	1	1	0	0	2	2	4	2	31
CEILING	00	2	1	1	1	2	2	2	1	2	3	1	3	2	30
LESS 200	03	4	2	1	1	0	0	1	1	2	3	1	3	2	30
PT ANG/DR	06	4	2	1	1	0	0	1	1	2	3	1	3	2	30
VISIBILITY	09	2	1	1	1	0	0	1	1	2	3	1	3	2	33
LESS 3/4 MI	12	1	0												







STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93901		Dallas, Texas		32° 44' N		96° 58' W		495		KNBE			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	USN	1949	1957	32° 44' N	96° 58' W	469	Tunnelot	Var				
2.	" "	"	1957	1967	"	"	"	"	24				
3.	" "	"	1967	1969	"	"	"	"	24				
4.	Removed November 1969												
1a.	Weather service office	"	1961	1967	"	"	474	Aneroid	24				
1b.	" "	"	1967		"	"	"	"	24				

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE	
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	Atop building 20	Unknown	Unknown	75'	1. Barograph (ML-3) 2. Auto Met station (AN/GMQ-29)
2.	1961	1600 feet northwest of weather service office, adjacent to runway 17-35	AN/UMQ-5	RD-108	10'	3. Cloud height set (AN/GMQ-13) 4. Transmissometer (AN/GMQ-10C) 5. Ceiling light (ML-121)
3.	1966	500 feet east of center line of runway 17-35 and 350 feet south-west of center line of taxiway #3	"	RD-108B	15'	
4.	1975	500 feet east of center line of runway 17 - 35	"	RD-447/ GMQ 29	18'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Diego Garcia is located in the Indian Ocean just south of the equator. The main island is 37 miles long and about 1/2 mile in width. The maximum elevation is 10 feet above mean sea level.

The island's climate is characterized by plenty of sunshine, showery precipitation, light breezes and lush green foliage.

The surface winds show a pronounced seasonal change. January through March winds are generally from the west. April and May are transitional months when surface winds shift from the westerly direction to a southeasterly direction. June through September is a period of consistent southeasterly trade winds. From October into December the surface winds gradually shift to a westerly direction.

The temperatures also follow a seasonal pattern. Higher aver-

age temperatures occur during the period of the westerlies and the calms. Monthly maximum temperatures average 85 degrees annually with a monthly maximum of 87 degrees for March and April. The southeasterly trades bring lower average temperatures. Monthly minimum temperatures average 76 degrees annually with a monthly minimum of 75 degrees for August and September. The diurnal temperature change is minimal year around.

Rainfall is greatest during the months of January, February, October, and December and least during the period of the southeast trades. Monthly rainfall seldom exceeds 25 inches. Rainfall during any particular month may vary from 4 to 14 inches. Months with less than 1 inch of rain are uncommon. Approximately eighteen days with precipitation per month can be expected. Tropical cyclones sometimes form or pass to the south of the island producing moderate rainfall and fresh westerly winds.

DIEGO GARCIA



PERIOD: JAN 51-DEC 77  
ELEV : 9  
STN LYRS: RJDG  
WBAN # : 70701  
WMO # : 61967

REMARKS: DATA NOT AVAILABLE. # LESS THAN 0.5 DAY, 0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE. THE VALUE LISTED UNDER "PRESS ALT FEET 99.999" INDICATES IT IS EXCEEDED ONLY 0.098 OF THE TIME. EYR MEANS EQUIVALENT YEARS OF RECORD (I.E., THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, FOR).

[illegible]



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1881	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1882	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1883	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1884	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1885	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1886	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1887	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1888	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1889	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1890	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1891	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1892	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1893	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1894	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1895	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1896	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1897	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1898	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1899	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1900	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1901	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1902	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1903	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1904	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1905	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1906	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1907	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1908	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1909	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87
1910	10.88	9.78	10.88	10.08	9.87	9.88	9.38	9.87	9.87	9.87	9.87	9.87	9.87

## MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1952	80.6	82.9	82.0	81.6	81.7	79.4	79.7	79.6	79.8	79.5	79.5	79.5	79.5
1953	81.1	82.4	81.5	82.4	82.3	80.3	79.1	79.3	79.5	79.5	79.5	79.5	79.5
1954	81.1	82.0	82.1	81.9	82.5	79.1	79.5	79.4	79.5	79.5	79.5	79.5	79.5
1955	81.0	81.5	80.5	80.1	79.3	77.4	77.4	77.6	77.1	77.1	80.3	81.3	79.6
1956	81.0	81.5	82.5	82.9	82.1	79.8	79.4	79.4	79.5	79.5	80.3	81.3	79.6
1957	81.6	82.4	82.9	82.2	82.1	80.3	79.4	79.6	79.6	79.2	80.7	81.2	81.2
1958	81.6	82.4	82.2	81.8	82.3	77.3	77.3	77.0	77.0	77.1	79.1	80.2	80.2
1959	81.6	82.4	81.8	81.8	81.2	79.5	79.5	79.2	81.1	81.1	82.3	82.6	81.1
1960	81.7	82.5	82.6	82.4	81.4	80.0	79.0	79.3	80.2	81.1	82.3	82.6	81.1
1961	81.7	82.5	81.6	83.1	81.3	80.3	79.3	79.7	80.1	81.5	82.0	81.1	81.1
1962	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1963	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1964	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1965	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1966	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1967	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1968	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1969	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1970	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1971	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1972	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1973	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1974	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1975	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1976	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1977	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1978	81.7	82.5	81.6	81.8	81.2	79.6	79.6	79.4	79.4	80.4	80.6	81.1	80.0
1979	81.7	82.5	81.7	82.5	82.5	81.4	80.0	79.4	80.4	80.4	80.7	81.6	81.6
1980	81.3	81.5	82.1	82.3	81.4	79.9	79.0	79.8	79.9	80.0	80.0	81.1	80.6
MEAN	81.3	81.5	82.1	82.3	81.4	79.9	79.0	79.8	79.9	80.0	80.0	81.1	80.6

## HEATING DEGREE DAYS

[illegible]

**COOLING DEGREE DAYS**

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1921	490	457	H	510	555	442	439	426	427	487	516	544	H
1922	464	520	401	582	539	449	420	395	425	440	462	482	H
1923	516	522	461	521	521	461	461	461	461	461	461	461	5077
1924	562	511	581	562	486	457	420	405	431	461	507	507	1987
1925	544	461	541	511	465	392	410	431	431	461	471	502	5040
1926													
1927	495	477	523	523	480	496	422	394	425	456	476	520	3776
1928	517	517	521	524	539	455	430	434	434	H	509	554	4004
1929	569	512	570	511	476	441	440	441	441	457	486	504	4004
1930	519	519	519	519	519	519	519	519	519	519	519	519	5191
1931	550	550	550	550	550	550	550	550	550	550	550	550	5501
1932	514	542	544	507	441	455	474	493	441	428	465	472	3761
1933	508	462	504	536	525	461	442	431	468	519	523	507	4050
1934	500	497	534	556	521	472	442	471	441	440	447	437	3778
1935	498	498	510	519	517	460	442	409	420	476	513	5679	
1936													
1937	532	490	539	508	522	437	479	437	454	491	482	497	3951
1938	490	484	524	518	481	440	440	440	440	440	440	440	4401
1939	490	490	490	490	490	490	490	490	490	490	490	490	4901
1940	509	487	514	547	538	453	481	480	486	480	479	519	3995
1941	514	501	537	540	539	477	448	441	461	460	473	505	3888
1942													
1943	475	447	512	497	506	452	444	426	414	453	427	493	3518
1944	522	505	510	510	491	422	440	461	445	500	527	548	3979
1945	507	497	497	497	497	497	497	497	497	497	497	497	4971
1946	479	479	479	479	479	479	479	479	479	479	479	479	4791
1947	487	487	487	487	487	487	487	487	487	487	487	487	4871
1948	475	475	475	475	475	475	475	475	475	475	475	475	4751
1949	476	475	475	512	505	493	475	450	471	486	497	516	H
1950	489	477	530	536	530	497	442	454	H	449	477	512	H
1951													
1952	517	477	542	531	532	458	444	437	436	476	485	512	3840

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO ON SUMMARY		STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT.)	CALL SIGN	WMO NUMBER
70701		Diego Garcia	7°18'S	72°24'E	9	FJDG	61967

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Island of Mauritius Met. Office	G.B.	1951	1971	7°14'S	72°26'E	7	Unknown	UNK
	Met Van	Navy	1971	Aug 1973	7°42'S	72°24'E	6	Aneroid	*
2.	Air Operations Bldg	"	1973		7°18'S	72°24'E	5	"	24
* Limited observing program from July 1971 through May 1974 (8 obs/day). The observing program became fully operational June 1974 (24 obs/day).									

SURFACE WIND EQUIPMENT INFORMATION					REMARKS: ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE	
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1971	Top of Met Van	UMQ-5	RD-108	17'	1. Barograph (ML-3) 2. Elec. Psychrometer (ML-450A) 3. Radiosonde (AN/GMD-1B) 4. APT (SMQ-6) 5. Semi-auto Met Station(AN/GMQ-14) 6. Ceiling light (ML-121) 7. Theodolite (Shore Type) 8. Thermoscreen (ML-41) 9. Rawinsonde Set (GMD 1B)
2.	1973	Met. Pad (433' SW of Air Ops Bldg)	"	RD-108B	11'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station El Toro (Santa Ana) is located in the southern section of an area known as the "Los Angeles Basin". The air station is screened on 3 sides by mountain barriers. Land in the immediate vicinity of the station is cleared and cultivated and under extensive urbanization.

The region in which the air station is located enjoys one of the most equable climates in North America. The summer begins in April and lasts through October. Increased stability in the lower levels favors the occurrence of restrictions to visibility in the form of haze, fog, and stratus. The prevailing wind direction is west at 5 knots.

The dry easterly winds (Santa Ana) that sometimes blow for several days at a time, bring temperatures in the 90's, and at times

over 100 degrees F. Since September 1949, this station has recorded a total of 25 days during which the temperature has reached or exceeded 100 degrees F. while under the influence of the "Santa Ana" winds.

The "Santa Ana" wind that is experienced at this station may occur in almost any month of the year; however, it is predominantly a winter phenomenon.

Precipitation at this station is primarily a winter time phenomenon. The rainy season runs from November through May. The average rainfall is approximately 12 inches and the major portion of it usually falls during winter storms. Snow has been observed at this station upon rare occasions and the accumulation has been negligible.

EL TORO, CALIFORNIA



STN LTRS: KNZJ  
WDBAN # : 99101  
WMO # :

PERIOD: APR 45-DEC 77  
ELEV : 383

STATION NAME: EL TORO, CALIFORNIA  
LOCATION : N33 40 W117 44

PREPARED BY: NNSD ASHEVILLE  
JUNE 1978

[illegible]

FLYING WEA	%	HRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EYE
CEILING	01	14	17	17	17	17	18	22	28	29	25	23	21	17	14	21	32
LESS 500	04	15	18	17	18	17	20	25	37	42	35	29	23	17	15	25	32
PT AND/OR	07	23	22	22	22	22	23	26	30	32	32	31	28	27	22	27	33
VISIBILITY	10	23	20	19	12	10	10	10	6	2	3	6	12	20	22	13	33
LESS 3 MI	13	14	17	14	10	10	10	10	6	2	3	4	7	13	16	10	33
	16	14	14	13	8	6	9	8	6	2	3	2	6	12	13	9	33
	19	14	12	13	9	5	12	9	5	2	4	5	9	9	11	9	33
	22	16	15	15	16	18	15	16	17	13	11	17	16	12	12	15	33
ALL HRS	17	17	16	15	16	17	15	16	17	16	14	15	15	16	16	16	33
CEILING	01	12	13	12	13	12	11	11	8	7	8	11	13	13	11	11	32
LESS 500	04	13	14	12	14	12	12	13	15	14	15	15	15	14	13	14	32
PT AND/OR	07	20	18	17	15	15	15	16	10	9	13	18	20	23	19	16	33
VISIBILITY	10	20	17	15	9	8	10	10	6	3	2	4	7	17	19	10	33
LESS 1 MI	13	14	14	13	10	10	10	10	6	3	3	3	7	12	13	9	33
	16	12	12	13	8	6	6	6	6	2	3	2	6	10	11	8	33
	19	11	10	11	7	4	4	7	4	2	3	2	6	8	9	7	33
	22	12	11	8	6	4	4	6	4	2	2	2	6	9	10	6	32
ALL HRS	14	13	13	10	9	7	10	9	7	5	6	8	11	13	13	10	33
CEILING	01	10	11	7	11	10	7	7	4	2	3	7	9	11	9	8	32
LESS 200	04	10	11	8	10	10	8	6	3	2	5	10	16	12	12	9	32
PT AND/OR	07	18	16	14	14	14	11	7	3	2	7	10	17	20	17	11	33
VISIBILITY	10	19	14	9	2	2	10	8	4	3	3	3	7	15	13	9	33
LESS 1 1/2 MI	13	14	13	10	9	13	10	10	6	2	3	3	6	10	11	8	33
	16	11	11	8	9	10	8	7	4	2	3	2	6	6	8	6	33
	19	9	9	7	7	10	6	5	4	2	3	2	6	6	6	6	32
	22	11	9	6	5	9	6	7	3	3	1	2	6	6	8	6	32
ALL HRS	13	12	12	8	9	12	8	7	3	3	3	4	8	12	12	8	33



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1964	N	N	2.65	1.8	.51	.23	.02	.46	T	.79	.58	.53	N
1965	.17	.48	.80	.15	.01	.03	.02	.46	T	.79	.58	.53	N
1966	.41	.86	.80	.17	.29	.07	.00	.03	.12	.12	.44	.13	.66
1967	.11	.70	1.16	.78	.52	.13	T	T	T	.05	.00	.21	7.76
1968	3.76	1.09	1.96	2.06	.52	.13	T	T	T	.12	1.17	1.68	N
1969	2.20	1.79	.83	.39	.20	T	T	.07	T	.02	1.32	.04	7.40
1970	2.46	2.46	.44	.76	.04	T	T	.15	T	.02	.76	.04	1.94
1971	1.52	1.46	.64	.76	.04	T	T	.15	T	.02	.76	.04	1.94
1972	1.52	1.46	.64	.76	.04	T	T	.15	T	.02	.76	.04	1.94
1973	.92	.41	1.93	.68	.08	T	T	T	T	.02	.76	.04	1.94
1974	4.56	1.62	3.93	.10	.03	T	T	T	T	.02	.76	.04	1.94
1975	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1976	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1977	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1978	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1979	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1980	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1981	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1982	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1983	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1984	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1985	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1986	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1987	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1988	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1989	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1990	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1991	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1992	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1993	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1994	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1995	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1996	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1997	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
1998	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
1999	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
2000	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94
2001	1.95	4.45	1.89	.79	.02	T	T	T	T	.02	.76	.04	1.94
2002	1.18	1.89	.79	.02	T	T	T	T	T	.02	.76	.04	1.94

## COOLING DEGREE DAYS

Year	Jan	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1963			5	1	7	21	137	225	229	66	26	0	8
1964	0	0	1	1	1	1	1	1	1	1	1	1	1
1965	0	0	1	1	1	1	1	1	1	1	1	1	1
1966	0	0	1	1	1	1	1	1	1	1	1	1	1
1967	0	0	1	1	1	1	1	1	1	1	1	1	1
1968	0	0	1	1	1	1	1	1	1	1	1	1	1
1969	0	0	1	1	1	1	1	1	1	1	1	1	1
1970	0	0	1	1	1	1	1	1	1	1	1	1	1
1971	0	0	1	1	1	1	1	1	1	1	1	1	1
1972	0	0	1	1	1	1	1	1	1	1	1	1	1
1973	0	0	1	1	1	1	1	1	1	1	1	1	1
1974	0	0	1	1	1	1	1	1	1	1	1	1	1
1975	0	0	1	1	1	1	1	1	1	1	1	1	1
1976	0	0	1	1	1	1	1	1	1	1	1	1	1
1977	0	0	1	1	1	1	1	1	1	1	1	1	1
1978	0	0	1	1	1	1	1	1	1	1	1	1	1
1979	0	0	1	1	1	1	1	1	1	1	1	1	1
1980	0	0	1	1	1	1	1	1	1	1	1	1	1
1981	0	0	1	1	1	1	1	1	1	1	1	1	1
1982	0	0	1	1	1	1	1	1	1	1	1	1	1
1983	0	0	1	1	1	1	1	1	1	1	1	1	1
1984	0	0	1	1	1	1	1	1	1	1	1	1	1
1985	0	0	1	1	1	1	1	1	1	1	1	1	1
1986	0	0	1	1	1	1	1	1	1	1	1	1	1
1987	0	0	1	1	1	1	1	1	1	1	1	1	1
1988	0	0	1	1	1	1	1	1	1	1	1	1	1
1989	0	0	1	1	1	1	1	1	1	1	1	1	1
1990	0	0	1	1	1	1	1	1	1	1	1	1	1
1991	0	0	1	1	1	1	1	1	1	1	1	1	1
1992	0	0	1	1	1	1	1	1	1	1	1	1	1
1993	0	0	1	1	1	1	1	1	1	1	1	1	1
1994	0	0	1	1	1	1	1	1	1	1	1	1	1
1995	0	0	1	1	1	1	1	1	1	1	1	1	1
1996	0	0	1	1	1	1	1	1	1	1	1	1	1
1997	0	0	1	1	1	1	1	1	1	1	1	1	1
1998	0	0	1	1	1	1	1	1	1	1	1	1	1
1999	0	0	1	1	1	1	1	1	1	1	1	1	1
2000	0	0	1	1	1	1	1	1	1	1	1	1	1
2001	0	0	1	1	1	1	1	1	1	1	1	1	1
2002	0	0	1	1	1	1	1	1	1	1	1	1	1
2003	0	0	1	1	1	1	1	1	1	1	1	1	1
2004	0	0	1	1	1	1	1	1	1	1	1	1	1
2005	0	0	1	1	1	1	1	1	1	1	1	1	1
2006	0	0	1										

## MEAN TEMPERATURE °F

[illegible]

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1874-75	0	0	0	0	26	180	309	312	361	221	133	44	1824
1875-76	0	0	0	0	106	280	244	347	255	158	83	10	1874
1876-77	0	0	0	0	43	248	310	307	186	208	130	46	1874
1877-78	0	0	2	15	74	181	448	607	429	461	113	5	2438
1878-79	0	0	0	0	0	0	365	304	280	156	48	0	1874
1879-80	0	0	0	0	12	148	198	372	341	274	200	123	25
1880-81	0	0	0	0	0	0	236	251	231	244	151	61	1080
1881-82	0	0	0	0	0	0	359	216	799	244	151	61	1080
1882-83	0	0	0	0	1	14	62	337	272	382	173	261	109
1883-84	0	0	0	0	0	0	208	0	273	198	209	139	74
1884-85	0	0	0	0	0	0	115	315	373	215	228	94	7
1885-86	0	0	0	0	0	0	159	188	189	111	132	94	1329
1886-87	0	0	0	0	0	0	116	155	214	268	111	62	71
1887-88	0	0	0	0	0	0	363	367	388	327	117	95	1272
1888-89	0	0	0	0	0	0	180	243	197	144	223	124	1020
1889-90	0	0	0	0	0	0	277	430	367	431	376	113	2288
1890-91	0	0	0	0	0	0	116	241	267	267	260	70	1824
1891-92	0	0	0	0	0	0	216	341	367	367	301	227	1667
1892-93	0	0	0	0	0	0	239	295	257	301	247	298	1667
1893-94	0	0	0	0	0	0	218	279	281	224	177	135	1878
1894-95	0	0	0	0	0	0	184	295	310	177	119	353	1869
1895-96	0	0	0	0	0	0	164	295	310	177	119	353	1869
1896-97	0	0	0	0	0	0	134	306	302	152	183	404	1869
1897-98	0	0	0	0	0	0	187	421	301	247	298	32	1869
1898-99	0	0	0	0	0	0	235	301	338	267	185	49	1869
1899-00	0	0	0	0	0	0	101	289	259	218	188	140	1869
1900-01	0	0	0	0	0	0	101	289	259	218	188	140	1869
1901-02	0	0	0	0	0	0	101	289	259	218	188	140	1869
1902-03	0	0	0	0	0	0	101	289	259	218	188	140	1869
1903-04	0	0	0	0	0	0	101	289	259	218	188	140	1869
1904-05	0	0	0	0	0	0	101	289	259	218	188	140	1869
1905-06	0	0	0	0	0	0	101	289	259	218	188	140	1869
1906-07	0	0	0	0	0	0	101	289	259	218	188	140	1869
1907-08	0	0	0	0	0	0	101	289	259	218	188	140	1869
1908-09	0	0	0	0	0	0	101	289	259	218	188	140	1869
1909-10	0	0	0	0	0	0	101	289	259	218	188	140	1869
191													

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93101		El Toro, California		33°40'N		117°44'W		383		KNZJ			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Aerological office (southwest side of field)	MCAS		1955	33°40'N	117°44'W	355	Mercurial	24				
2.	Aerological office (northeast side of field in tower building)	"	1955	1958	"	"	380	"	24				
3.	Room 102, building 372	"	1958		"	"	380 Above Grd 21	"	24				
1a.	Mounted on wall in Room 102	"	Unknown	1965	"	"	383	Aneroid	24				
1b.	Mounted in AN/GMQ-14 console in room 102, building 372	"	1965		"	"	382 Above Grd 23	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.		Atop control tower	Selsyn	Double register	1. Aneroid barometer (ML-448/UM) 2. Barograph (Aero 1932) 3. Semi-auto Met sta AN/GMQ-14(A) 4. Ceiling light (ML-121) 5. Cloud height set AN/GMQ-13 6. Theodolite (ML-247) 7. Transmissometer AN/GMQ-10 8. Weather vision AN/GMQ-19(V) 9. Gage, Precipitation (ML-558/GMQ-14) 10. Gage, Precipitation (ML-217)
2.	1958	Northeast of the intersection of runways 34 and 25	AN/UMQ-5	RD-108B	
3.	1965	Same location, change in height			

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Station Fallon, Nevada is located 50 miles east of Reno. The terrain is largely sagebrush and desert. Numerous dry lakes dot the area. The mountains that surround Fallon act as a barrier to the influx of warm moist air from the Pacific Ocean. The Sierra range modifies approaching frontal systems so that they pass over Fallon with the moisture content and temperature markedly reduced.

November marks the beginning of the winter season which lasts until March. Cloudiness and cool temperatures predominate. Cold fronts often provide little more than gusty winds and scattered to broken clouds. Zonal flow during the winter months produces fast moving low pressure systems with abundant moisture, resulting in severe turbulence and icing over the Sierra Nevada's.

Precipitation averages .5 inches during the winter months usually as light showers. Snowfall exceeding 2 inches seldom occurs. Comparatively warm maximum temperatures melt the snow in a day or two. Fog is an occasional problem in restricting visibilities, but rarely persists beyond the morning hours. December and Jan-

uary are the months of greatest fog frequency, occurring on an average of 4 days.

Winter storm tracks are generally located to the north of Fallon and spring-like weather prevails. Occasionally a storm brings deteriorating conditions with freakish snowfalls and freezing temperatures.

May marks the beginning of summer which lasts until September. During the summer, hot dry weather dominates. Thunderstorms typically develop late in the afternoon in the foothills to the south. Strong gusty winds associated with these thunderstorms occasionally obscure visibilities with blowing dust. For the most part, these storms are confined to the surrounding foothills and rarely pass directly over the station. Dustdevils are quite frequent during the day over the alkali and sand flats. Only in July and August is the temperature consistently in the 90-degree range. Low humidity prevails through the summer which reduces the effects of high temperatures. Afternoon thunderstorms are primarily responsible for a summer average rainfall of .4 inches.

FALLON, NEVADA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: FALCON, NEVADA  
LOCATION: N39 25 W110 42

PERIOD: MAR 45-DEC 77  
ELEV: 3934

STN LTRS: KNEL  
MEAN # : 93102  
WMO # :

TEMPERATURE DEG F										PRECIPITATION INCHES										SNOWFALL RELATIVE										VAPOR										MEAN NUMBER OF DAYS OCCURRENCE OF									
MEAN										HOURS										IN										P										T									
DAILY										MAX										MM										R										H									
MIN										MIN										MAX										S										V									
MAX										MAX										MIN										R										S									
JAN 45										20										1.7										11										1									
FEB 51										26										3.9										11										1									
MAR 57										29										4.3										11										1									
APR 64										35										4.3										11										1									
MAY 74										40										4.6										11										1									
JUN 84										46										4.6										11										1									
JUL 93										58										4.6										11										1									
AUG 90										56										4.6										11										1									
SEP 81										48										4.6										11										1									
OCT 68										37										4.6										11										1									
NOV 58										26										4.6										11										1									
DEC 46										21										4.6										11										1									
ANN 67										38										4.6										11										1									
REMARKS										24										24										24										24									
DATA NOT AVAILABLE										24										24										24										24									
THE VALUE LISTED UNDER "PRESS ALT FEET 99.98" INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME.										24										24										24										24									
EVR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, FOR).										24										24										24										24									
FLYING MEAS & HRS										LST										ALL HRS										ALL HRS										ALL HRS									
CEILING										01										01										01										01									
LESS 5000										04										04										04										04									
PT AND/OR										07										07										07										07									
VISIBILITY										10										10										10										10									
LESS 5 MI										13										13										13										13									
										16										16										16										16									
										19										19										19										19									
ALL HRS										22										22										22										22									
CEILING										01										01										01										01									
LESS 1000										04										04										04										04									
PT AND/OR										07										07										07										07									
VISIBILITY										10										10										10										10									
LESS 2 MI										13										13										13										13									
										16										16										16										16									
										19										19										19										19									
ALL HRS										22										22										22										22									



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec.	Annual
1885	27.4	32.3	45.1	58.0	69.3	82.8	73.5	77.2	65.4	58.5	38.4	34.6	51.7
1886	31.9	42.0	54.0	67.0	78.0	88.0	78.0	71.0	60.0	48.0	35.0	31.0	61.0
1887	34.0	44.0	56.0	69.0	80.0	90.0	80.0	73.0	62.0	50.0	37.0	33.0	63.0
1888	36.0	46.0	58.0	71.0	82.0	92.0	82.0	75.0	64.0	52.0	39.0	35.0	65.0
1889	38.0	48.0	60.0	73.0	84.0	94.0	84.0	77.0	66.0	54.0	41.0	37.0	67.0
1890	40.0	50.0	62.0	75.0	86.0	96.0	86.0	79.0	68.0	56.0	43.0	39.0	69.0
1891	42.0	52.0	64.0	77.0	88.0	98.0	88.0	81.0	70.0	58.0	45.0	41.0	71.0
1892	44.0	54.0	66.0	79.0	90.0	100.0	90.0	83.0	72.0	60.0	47.0	43.0	73.0
1893	46.0	56.0	68.0	81.0	92.0	102.0	92.0	85.0	74.0	62.0	49.0	45.0	75.0
1894	48.0	58.0	70.0	83.0	94.0	104.0	94.0	87.0	76.0	64.0	51.0	47.0	77.0
1895	50.0	60.0	72.0	85.0	96.0	106.0	96.0	89.0	78.0	66.0	53.0	49.0	79.0
1896	52.0	62.0	74.0	87.0	98.0	108.0	98.0	91.0	80.0	68.0	55.0	51.0	81.0
1897	54.0	64.0	76.0	89.0	100.0	110.0	100.0	93.0	82.0	70.0	57.0	53.0	83.0
1898	56.0	66.0	78.0	91.0	102.0	112.0	102.0	95.0	84.0	72.0	59.0	55.0	85.0
1899	58.0	68.0	80.0	93.0	104.0	114.0	104.0	97.0	86.0	74.0	61.0	57.0	87.0
1900	60.0	70.0	82.0	95.0	106.0	116.0	106.0	99.0	88.0	76.0	63.0	59.0	89.0
1901	62.0	72.0	84.0	97.0	108.0	118.0	108.0	101.0	90.0	78.0	65.0	61.0	91.0
1902	64.0	74.0	86.0	99.0	110.0	120.0	110.0	103.0	92.0	80.0	67.0	63.0	93.0
1903	66.0	76.0	88.0	101.0	112.0	122.0	112.0	105.0	94.0	82.0	69.0	65.0	95.0
1904	68.0	78.0	90.0	103.0	114.0	124.0	114.0	107.0	96.0	84.0	71.0	67.0	97.0
1905	70.0	80.0	92.0	105.0	116.0	126.0	116.0	109.0	98.0	86.0	73.0	69.0	99.0
1906	72.0	82.0	94.0	107.0	118.0	128.0	118.0	111.0	100.0	88.0	75.0	71.0	101.0
1907	74.0	84.0	96.0	109.0	120.0	130.0	120.0	113.0	102.0	90.0	77.0	73.0	103.0
1908	76.0	86.0	98.0	111.0	122.0	132.0	122.0	115.0	104.0	92.0	79.0	75.0	105.0
1909	78.0	88.0	100.0	113.0	124.0	134.0	124.0	117.0	106.0	94.0	81.0	77.0	107.0
1910	80.0	90.0	102.0	115.0	126.0	136.0	126.0	119.0	108.0	96.0	83.0	79.0	109.0
1911	82.0	92.0	104.0	117.0	128.0	138.0	128.0	121.0	110.0	98.0	85.0	81.0	111.0
1912	84.0	94.0	106.0	119.0	130.0	140.0	130.0	123.0	112.0	100.0	87.0	83.0	113.0
1913	86.0	96.0	108.0	121.0	132.0	142.0	132.0	125.0	114.0	102.0	89.0	85.0	115.0
1914	88.0	98.0	110.0	123.0	134.0	144.0	134.0	127.0	116.0	104.0	91.0	87.0	117.0
1915	90.0	100.0	112.0	125.0	136.0	146.0	136.0	129.0	118.0	106.0	93.0	89.0	119.0
1916	92.0	102.0	114.0	127.0	138.0	148.0	138.0	131.0	120.0	108.0	95.0	91.0	121.0
1917	94.0	104.0	116.0	129.0	140.0	150.0	140.0	133.0	122.0	110.0	97.0	93.0	123.0
1918	96.0	106.0	118.0	131.0	142.0	152.0	142.0	135.0	124.0	112.0	99.0	95.0	125.0
1919	98.0	108.0	120.0	133.0	144.0	154.0	144.0	137.0	126.0	114.0	101.0	97.0	127.0
1920	100.0	110.0	122.0	135.0	146.0	156.0	146.0	139.0	128.0	116.0	103.0	99.0	129.0
1921	102.0	112.0	124.0	137.0	148.0	158.0	148.0	141.0	130.0	118.0	105.0	101.0	131.0
1922	104.0	114.0	126.0	139.0	150.0	160.0	150.0	143.0	132.0	120.0	107.0	103.0	133.0
1923	106.0	116.0	128.0	141.0	152.0	162.0	152.0	145.0	134.0	122.0	109.0	105.0	135.0
1924	108.0	118.0	130.0	143.0	154.0	164.0	154.0	147.0	136.0	124.0	111.0	107.0	137.0
1925	110.0	120.0	132.0	145.0	156.0	166.0	156.0	149.0	138.0	126.0	113.0	109.0	139.0
1926	112.0	122.0	134.0	147.0	158.0	168.0	158.0	151.0	140.0	128.0	115.0	111.0	141.0
1927	114.0	124.0	136.0	149.0	160.0	170.0	160.0	153.0	142.0	130.0	117.0	113.0	143.0
1928	116.0	126.0	138.0	151.0	162.0	172.0	162.0	155.0	144.0	132.0	119.0	115.0	145.0
1929	118.0	128.0	140.0	153.0	164.0	174.0	164.0	157.0	146.0	134.0	121.0	117.0	147.0
1930	120.0	130.0	142.0	155.0	166.0	176.0	166.0	159.0	148.0	136.0	123.0	119.0	149.0
1931	122.0	132.0	144.0	157.0	168.0	178.0	168.0	161.0	150.0	138.0	125.0	121.0	151.0
1932	124.0	134.0	146.0	159.0	170.0	180.0	170.0	163.0	152.0	140.0	127.0	123.0	153.0
1933	126.0	136.0	148.0	161.0	172.0	182.0	172.0	165.0	154.0	142.0	129.0	125.0	155.0
1934	128.0	138.0	150.0	163.0	174.0	184.0	174.0	167.0	156.0	144.0	131.0	127.0	157.0
1935	130.0	140.0	152.0	165.0	176.0	186.0	176.0	169.0	158.0	146.0	133.0	129.0	159.0
1936	132.0	142.0	154.0	167.0	178.0	188.0	178.0	171.0	160.0	148.0	135.0	131.0	161.0
1937	134.0	144.0	156.0	169.0	180.0	190.0	180.0	173.0	162.0	150.0	137.0	133.0	163.0
1938	136.0	146.0	158.0	171.0	182.0	192.0	182.0	175.0	164.0	152.0	139.0	135.0	165.0
1939	138.0	148.0	160.0	173.0	184.0	194.0	184.0	177.0	166.0	154.0	141.0	137.0	167.0
1940	140.0	150.0	162.0	175.0	186.0	196.0	186.0	179.0	168.0	156.0	143.0	139.0	169.0
1941	142.0	152.0	164.0	177.0	188.0	198.0	188.0	181.0	170.0	158.0	145.0	141.0	171.0
1942	144.0	154.0	166.0	179.0	190.0	200.0	190.0	183.0	172.0	160.0	147.0	143.0	173.0
1943	146.0	156.0	168.0	181.0	192.0	202.0	192.0	185.0	174.0	162.0	149.0	145.0	175.0
1944	148.0	158.0	170.0	183.0	194.0	204.0	194.0	187.0	176.0	164.0	151.0	147.0	177.0
1945	150.0	160.0	172.0	185.0	196.0	206.0	196.0	189.0	178.0	166.0	153.0	149.0	179.0
1946	152.0	162.0	174.0	187.0	198.0	208.0	198.0	191.0	180.0	168.0	155.0	151.0	181.0
1947	154.0	164.0	176.0	189.0	200.0	210.0	200.0	193.0	182.0	170.0	157.0	153.0	183.0
1948	156.0	166.0	178.0	191.0	202.0	212.0	202.0	195.0	184.0	172.0	159.0	155.0	185.0
1949	158.0	168.0	180.0	193.0	204.0	214.0	204.0	197.0	186.0	174.0	161.0	157.0	187.0
1950	160.0	170.0	182.0	195.0	206.0	216.0	206.0	199.0	188.0	176.0	163.0	159.0	189.0
1951	162.0	172.0	184.0	197.0	208.0	218.0	208.0	201.0	190.0	178.0	165.0	161.0	191.0
1952	164.0	174.0	186.0	199.0	210.0	220.0	210.0	203.0	192.0	180.0	167.0	163.0	193.0
1953	166.0	176.0	188.0	201.0	212.0	222.0	212.0	205.0	194.0	182.0	169.0	165.0	195.0
1954	168.0	178.0	190.0	203.0	214.0	224.0	214.0	207.0	196.0	184.0	171.0	167.0	197.0
1955	170.0	180.0	192.0	205.0	216.0	226.0	216.0	209.0	198.0	186.0	173.0	169.0	199.0
1956	172.0	182.0	194.0	207.0	218.0	228.0	218.0	211.0	200.0	188.0	175.0	171.0	201.0
1957	174.0	184.0	196.0	209.0	220.0	230.0	220.0	213.0	202.0	190.0	177.0	173.0	203.0
1958	176.0	186.0	198.0	211.0	222.0	232.0	222.0	215.0	204.0	192.0	179.0	175.0	205.0
1959	178.0	188.0	200.0	213.0	224.0	234.0	224.0	217.0	206.0	194.0	181.0	177.0	207.0
1960	180.0	190.0	202.0	215.0	226.0	236.0	226.0	219.0	208.0	196.0	183.0	179.0	209.0
1961	182.0	192.0	204.0	217.0	228.0	238.0	228.0	221.0	210.0	198.0	185.0	181.0	211.0
1962	184.0	194.0	206.0	219.0	230.0	240.0	230.0	223.0	212.0	200.0	187.0	183.0	213.0
1963	186.0	196.0	208.0	221.0	232.0	242.0	232.0	225.0	214.0	202.0	189.0	185.0	215.0
1964	188.0	198.0	210.0	223.0	234.0	244.0	234.0	227.0	216.0	204.0	191.0	187.0	217.0
1965	190.0	200.0	212.0	225.0	236.0	246.0	236.0	229.0	218.0	206.0	193.0	189.0	219.0
1966	192.0	202.0	214.0	227.0	238.0	248.0	238.0	231.0	220.0	208.0	195.0	191.0	221.0
1967	194.0	204.0	216.0	229.0	240.0	250.0	240.0	233.0	222.0	210.0	197.0	193.0	223.0
1968	196.0	206.0	218.0	231.0	242.0	252.0	242.0	235.0	224.0	212.0	199.0	195.0	225.0
1969	198.0	208.0	220.0	233.0	244.0	254.0	244.0	237.0	226.0	214.0	201.0	197.0	227.0
1970	200.0	210.0	222.0	235.0	246.0	256.0	246.0	239.0	228.0	216.0	203.0	199.0	229.0
1971	202.0	212.0	224.0	237.0	248.0	258.0	248.0	241.0	230.0	218.0	205.0	201.0	231.0
1972	204.0	214.0	226.0	239.0	250.0	260.0	250.0	243.0	232.0	220.0	207.0	203.0	233.0
1													

[illegible][illegible][illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

cord; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**FALLON, NEVADA**



STATION NO. OR SUMMARY:		STATION NAME		LATITUDE:		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WHO NUMBER	
93102		Fallon, Nevada		39° 25' N		118° 42' W		3934		KNFL			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	Navy	1952	1967	39° 25' N	118° 42' W	3934	Mercurial	Var				
2.	" "	"	1967	1976	"	"	3940	"	Var				
1a.	" "	"	1968	1977	"	"	3942	Aneroid	Var				
1b.	ESE of Weather service office 1300 ft	"	1977		"	"	3940	Pressure transducer	18				

SURFACE WIND EQUIPMENT INFORMATION						REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1944	Roof	SA(F103-F003)	9 light	27'	
2.	Unknown	Aerovane atop 90' control tower 600' E of Aerology Bldg				
3.	"	HC anemometer atop Aerology Bldg	HC	"	30'	
4.	1955	21 foot platform(replaces item #3)	AN/UMQ-5B	Unknown	21'	
5.	1958	Atop control tower	AN/UMQ-5C	RD-108B	85'	
6.	1958	Relocated near main runway	"	"	15'	
7.	1977	Near main runway	"	R0447A	15'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station (H) Futenma, Okinawa is located on the western coast of south-central Okinawa. The South China Sea is 1 1/2 miles to the west. The most prominent topographic feature is the Maeda Escarpment which lies approximately 1 1/2 miles to the south through west-southwest with an average height of 330 feet.

The climate of Okinawa most closely resembles that of a tropical environment, warm summers with mild winters.

Flying conditions are generally good to excellent. Visual Flight Rules prevailing 94% of the time while below GCA minimums occur less than .2% of the time, although the average daily cloudiness is 7/10.

There are two primary seasons - winter (dry season) and summer (wet season). The wet season is May through September. Precip-

itation during the wet season more than doubles the average monthly precipitation of the dry season. The average annual precipitation for Okinawa is 79 inches.

Since Okinawa is a relatively small island, wind drainage, land and sea breezes are almost nil. Predominate wind direction throughout the year is north to east with an average of 8 knots. The exception being June when the wind direction prevails from the south.

Okinawa is commonly referred to as "typhoon alley". May through November is considered the peak of the typhoon season; however, typhoons have passed near or even over Okinawa during the remaining months.

The peak months for thunderstorms are June through September. An average monthly occurrence of 4 thunderstorms are observed, mainly associated with frontal passages.

FUTENMA, OKINAWA



STN LTRS: RDTM  
WBAN # : 42215  
WMO # : 47933

VS OCCURRENCE OF  
V S

K	Y	FQ	MAX	F	MIN
		DEG			
7	1	90	75	95	4
6	0	2	4	30	1
9	0	2	4	16	0
8	0	15	20	10	0
9	0	1	20	4	0
4	1	31	0	0	0
3	3	31	0	0	0
4	3	30	0	0	0
3	0	29	4	0	0
0	0	17	14	0	0
4	0	3	28	0	0
67	12	220	152	2	17
18	17	17	17	17	17

ANN	EVR
30	16
37	10
39	17
43	17
46	17
48	17
49	17
36	17
41	17
5	16
5	10
5	17
6	17
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2	16
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3	17
2	17
2	17
0	16
0	10
0	17
1	17
1	17
1	17
1	17
1	17



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1960	58.6	58.6	58.9	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.2	63.1	61.1
1961	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.2	63.1	61.0
1962	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.2	63.1	61.0
1963	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.2	63.1	61.0
1964	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1965	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1966	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1967	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1968	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1969	58.6	58.6	58.6	58.6	58.6	58.6	58.6	58.2	58.3	58.6	70.1	63.1	61.2
1970	58.2	58.2	58.2	58.9	58.3	58.0	58.6	58.3	58.6	71.4	71.7	58.1	72.4
1971	58.2	58.1	58.1	70.4	70.1	62.2	64.6	51.6	51.0	70.6	69.7	64.6	72.3
1972	58.2	58.1	58.1	70.4	70.1	62.2	64.6	51.6	51.0	70.6	69.7	64.6	72.3
1973	58.1	58.0	58.0	70.3	70.0	62.1	64.5	51.5	50.9	70.5	69.6	64.5	72.3
1974	58.1	58.0	58.0	70.3	70.0	62.1	64.5	51.5	50.9	70.5	69.6	64.5	72.3
1975	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1976	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1977	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1978	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1979	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1980	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1981	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1982	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1983	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1984	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1985	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1986	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1987	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1988	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1989	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
1990	58.9	58.9	58.9	68.6	70.1	71.6	81.7	64.1	61.6	78.2	72.6	68.1	75.1
mean	58.6	58.6	58.7	68.7	75.0	78.6	88.7	82.3	81.0	79.7	70.6	66.1	72.0

	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2
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## COOLING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
99-00	C	C	C	C	C	0	0	102	12	0	0	0	0
00-01	C	C	C	C	C	0	0	102	12	0	0	0	0
01-02	C	C	C	C	C	0	0	102	12	0	0	0	0
02-03	C	C	C	C	C	0	0	102	12	0	0	0	0
03-04	C	C	C	C	C	0	0	102	12	0	0	0	0
04-05	C	C	C	C	C	0	0	102	12	0	0	0	0
05-06	C	C	C	C	C	0	0	102	12	0	0	0	0
06-07	C	C	C	C	C	0	0	102	12	0	0	0	0
07-08	C	C	C	C	C	0	0	102	12	0	0	0	0
08-09	C	C	C	C	C	0	0	102	12	0	0	0	0
09-10	C	C	C	C	C	0	0	102	12	0	0	0	0
10-11	C	C	C	C	C	0	0	102	12	0	0	0	0
11-12	C	C	C	C	C	0	0	102	12	0	0	0	0
12-13	C	C	C	C	C	0	0	102	12	0	0	0	0
13-14	C	C	C	C	C	0	0	102	12	0	0	0	0
14-15	C	C	C	C	C	0	0	102	12	0	0	0	0
15-16	C	C	C	C	C	0	0	102	12	0	0	0	0
16-17	C	C	C	C	C	0	0	102	12	0	0	0	0
17-18	C	C	C	C	C	0	0	102	12	0	0	0	0
18-19	C	C	C	C	C	0	0	102	12	0	0	0	0
19-20	C	C	C	C	C	0	0	102	12	0	0	0	0
20-21	C	C	C	C	C	0	0	102	12	0	0	0	0
21-22	C	C	C	C	C	0	0	102	12	0	0	0	0
22-23	C	C	C	C	C	0	0	102	12	0	0	0	0
23-24	C	C	C	C	C	0	0	102	12	0	0	0	0
24-25	C	C	C	C	C	0	0	102	12	0	0	0	0
25-26	C	C	C	C	C	0	0	102	12	0	0	0	0
26-27	C	C	C	C	C	0	0	102	12	0	0	0	0
27-28	C	C	C	C	C	0	0	102	12	0	0	0	0
28-29	C	C	C	C	C	0	0	102	12	0	0	0	0
29-30	C	C	C	C	C	0	0	102	12	0	0	0	0
30-31	C	C	C	C	C	0	0	102	12	0	0	0	0
31-32	C	C	C	C	C	0	0	102	12	0	0	0	0
32-33	C	C	C	C	C	0	0	102	12	0	0	0	0
33-34	C	C	C	C	C	0	0	102	12	0	0	0	0
34-35	C	C	C	C	C	0	0	102	12	0	0	0	0
35-36	C	C	C	C	C	0	0	102	12	0	0	0	0
36-37	C	C	C	C	C	0	0	102	12	0	0	0	0
37-38	C	C	C	C	C	0	0	102	12	0	0	0	0
38-39	C	C	C	C	C	0	0	102	12	0	0	0	0
39-40	C	C	C	C	C	0	0	102	12	0	0	0	0
40-41	C	C	C	C	C	0	0	102	12	0	0	0	0
41-42	C	C	C	C	C	0	0	102	12	0	0	0	0
42-43	C	C	C	C	C	0	0	102	12	0	0	0	0
MEAN	0	0	0	0	0	0	0	174	135	79	12	0	485

MEAN	0	0	0	0	3	63	174	129	79	12	0	496
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## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1940													
1941	12	6			27	502	840	509	499	312	172	11	2,368
1942	0	7	24	13	37	240	350	350	314	274	179	38	1,926
1943	0	0	24	13	41	444	589	516	429	269	149	38	2,026
1944	20	0			30	340	536	516	439	132	40		2,026
1945													
1946	2	14	14	11	24	390	572		444	299	219	51	1,414
1947	30	27	34	146	230	346	354	429	429	309	171		2,244
1948	2	1	1	7	22	242	347	374	409	249	116	49	1,414
1949	76	39	39	137	151	341	577	401	401	208	14		2,244
1950													
1951	5	37	39	130	317	439	522	543	577	392	208	42	2,920
1952	0	4	44	170	221	221	415	229	497	346	180	37	2,214
1953	4	3	3	10	34	431	521	510	497	346	171	17	2,140
1954	0	39	39	264	316	431	521	510	497	346	171	17	2,140
1955	2	26	40	142	244	390	522	546	504	415	219	42	2,596
1956													
1957	9	34	18	270	293	397	524	546	504	320	161	39	2,113
1958	4	0	24	264	247	449	489	547	489	311	118	79	2,141
1959	1	7	28	146	263	444	489	572	516	467	202	36	2,443
1960													
1961	12	24	46	139	318	414	587	546	467	336	173	42	2,328

MEAN	12	24	46	109	316	424	537	546	607	326	173	62	3120
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The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

cord; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**FUTENMA, OKINAWA**



STATION NO OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
42215		Futenma, Okinawa		26°16'N		127°45'E		247 MSL		ROTM		47933	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, Bldg 510	MCAF	1960		26°16'N	127°45'E	275	Mercurial	Var				
1a.	" " " "	"	1961	1970	"	"	277	Aneroid	24				
2a.	" " " "	MCAS	1970		"	"	"	"	"				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1961	800 feet west of Bldg 510	UMQ-5	RD-108B	1. Barograph (ML-3-A) 2. Semi-auto met sta (AN/GMQ-14B) 3. Cloud height set (AN/GMQ-13) 4. Theodolite (ML-47P) 5. Transmissometer (AN/GMQ-10C) 6. Indicator, Digital (ID 1348 GMQ-10) 7. Converter (CV 2062 GMQ-10)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station, Glenview, Illinois is located near the southwest shore of Lake Michigan, 20 miles north-northwest of the Chicago Loop and 7 miles north-northeast of O'Hare International Airport.

Topography is generally level with a few small hills approximately 50 miles to the northwest. The significant topographical feature is Lake Michigan which lies 6 miles east of the station.

NAS Glenview is in a region of frequently changing weather. The climate is predominantly continental, ranging from warm in summer to cold in winter. Very low winter temperatures most often occur in air that flows southward to the west of Lake Superior before reaching NAS Glenview. During the summer months, the higher temperatures are associated with south to southwest flow that is not influenced by the lakes.

Thunderstorm activity increases in frequency starting in March, reaching the highest frequency in June, then decreasing there - after becoming nearly nonexistent in December.

During the late autumn, winter and early spring warm fronts become well-defined. Typical warm frontal weather prevails from the warm front northward 200 to 300 miles with widespread low stratus, rain or snow, and fog and smoke; with improving conditions after frontal passage. The typical warm front does not apply to those emanating from Alberta lows which have moved north of

Glenview. Cold frontal passages average 2 to 3 per week during the winter months accompanied by a broad band of snow or snow and rain showers. Heavy snow storms are produced when a polar outbreak moves north of the station and the Surface - 10,000 foot winds are from the north or northeast. As the cold air moves over the relatively warmer lake it acquires moisture. This unstable condition produces frequent heavy snow showers and near zero flying conditions. Snow accumulation is dependent upon the persistence of this condition.

The yearly prevailing wind direction has a westerly component, with the exception of April and May when the prevailing wind becomes north-northeasterly. The maximum wind velocity recorded was 80 knots from the northeast in January 1948.

The large size and depth of Lake Michigan, with the resulting slow temperature change of the lake water, combine to produce the main local effect on weather patterns. A lake breeze is created during the late spring and summer with an air-water temperature differential equal to or greater than 4 degrees F. The lake breeze penetration inland is rarely over 10 miles. With the greater Chicago industrial complex ranging 30 to 50 miles to the south and southeast, a wind from that direction will carry haze and smoke produced there to Glenview. Visibility may be reduced to 1 mile or less during the night and early morning and will remain less than 3 miles during the day.

GLENVIEW, ILLINOIS







## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1963	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1964	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1965	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1966	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1967	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1968	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1969	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1970	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1971	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1972	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1973	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1974	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1975	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1976	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1977	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1978	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1979	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1980	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1981	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1982	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1983	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1984	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1985	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1986	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1987	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1988	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1989	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1990	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1991	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1992	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1993	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1994	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1995	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1996	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1997	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1998	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
1999	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2000	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2001	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2002	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2003	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2004	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2005	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2006	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2007	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2008	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2009	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2010	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2011	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2012	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2013	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2014	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2015	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2016	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2017	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2018	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2019	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2020	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2021	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2022	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2023	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2024	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2025	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2026	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2027	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2028	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2029	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2030	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2031	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2032	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2033	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2034	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2035	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2036	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2037	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2038	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2039	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2040	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2041	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2042	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2043	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2044	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2045	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2046	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2047	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2048	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2049	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2050	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2051	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2052	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2053	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2054	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2055	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2056	1.66	1.68	1.69	1.68	1.65	1.63	1.74	1.72	1.61	1.61	1.51	1.37	1.61
2057	1.66	1.68	1.69	1.68	1.65	1.63	1.74						

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct	Nov.	Dec	Total
1968	0	0	0	10	12	96	191	200	98	0	0	0	704
1969	0	0	0	0	16	170	283	336	11	23	0	0	799
1970	0	0	0	0	21	0	112	247	119	2	0	0	694
1971	0	0	0	0	0	237	545	240	20	32	0	0	221
1972	0	0	0	0	19	135	182	125	35	27	0	0	521
1973	0	0	0	8	31	299	197	120	45	34	0	0	893
1974	0	0	0	0	0	120	200	175	109	24	0	0	629
1975	0	0	0	0	54	219	265	175	109	24	0	0	880
1976	0	0	0	3	18	270	293	198	111	24	0	0	1094
1977	0	0	0	0	0	10	137	422	177	108	0	0	844
1978	0	0	0	3	58	268	199	248	86	16	0	0	902
1979	0	0	0	0	3	19	199	332	86	16	0	0	602
1980	0	0	0	2	124	204	293	376	148	0	0	0	1107
1981	0	0	0	0	89	16	96	315	167	9	0	0	789
1982	0	0	0	0	21	150	260	295	164	11	0	0	870
1983	0	0	0	0	28	121	280	179	81	18	0	0	845
1984	0	0	0	0	0	284	564	197	121	0	0	0	962
1985	0	0	0	0	0	76	140	243	197	46	0	0	758
1986	0	0	0	0	0	24	228	267	214	75	0	0	991
1987	0	0	0	1	14	182	229	339	171	28	0	0	940
1988	0	0	0	0	0	18	182	229	339	171	0	0	940
1989	0	0	0	2	63	98	239	314	44	20	0	0	934
1990	0	0	0	14	64	175	211	203	78	4	0	0	867
1991	0	0	0	4	64	271	213	196	166	33	0	0	905
1992	0	0	0	0	0	87	260	391	44	0	0	0	897
1993	0	0	0	0	0	10	182	229	339	171	0	0	940
1994	0	0	0	15	20	190	211	192	138	13	1	0	792
1995	0	0	0	0	0	0	0	0	0	0	0	0	0
1996	0	0	0	0	77	264	312	267	34	39	0	0	929
1997	0	0	0	0	97	199	267	219	77	12	0	0	849
1998	0	0	0	0	164	119	939	224	99	0	2	0	1000
1999	0	0	0	0	65	168	267	238	88	17	0	0	831

## MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1964	16.8	17.0	17.2	17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	18.8
1965	17.0	17.2	17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	18.8
1966	17.2	17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.0
1967	17.4	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.2
1968	17.6	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	19.4
1969	17.8	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	19.6
1970	18.0	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	19.8
1971	18.2	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.0
1972	18.4	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.2
1973	18.6	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.8	20.4
1974	18.8	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.8	21.0	20.6
1975	19.0	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	20.8
1976	19.2	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.0
1977	19.4	19.6	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.2
1978	19.6	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	21.4
1979	19.8	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	21.6
1980	20.0	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	21.8
1981	20.2	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.0
1982	20.4	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.2
1983	20.6	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	22.4
1984	20.8	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	22.6
1985	21.0	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	22.8
1986	21.2	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.0
1987	21.4	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.2
1988	21.6	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.8	23.4
1989	21.8	22.0	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	23.6
1990	22.0	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	23.8
1991	22.2	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.0
1992	22.4	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.2
1993	22.6	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	24.4
1994	22.8	23.0	23.2	23.4	23.6	23.8	24.0	24.2	24.4	24.6	24.8	25.0	24.6
MEAN	22.5	22.6	22.7	22.8	22.9	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.4

## HEATING DEGREE DAYS

Season	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1894-95	19	12	137	426	749	1361	1268	1043		477	370	130	
1895-96	18	10	100	280	518	1000	1000	1000		472	368	112	
1896-97	23	4	54	436	690	1048	1168	1095	941	424	372	79	
1897-98										482	397	28	4202
1898-99	6	20	1	3	185	501	1068	1137	1052	719	249	25	6884
1899-00	1	38	48	400	931	1422	1860	1095	971	450	216	46	7054
1900-01	2	10	118	548	981	1422	1860	1095	971	450	216	46	7054
1901-02	2	10	118	548	981	1422	1860	1095	971	450	216	46	7054
1902-03	2	10	118	548	981	1422	1860	1095	971	450	216	46	7054
1903-04	2	10	118	548	981	1422	1860	1095	971	450	216	46	7054
1904-05	4	6	274	645	1051	1253	861	1004		440	340	53	6094
1905-06	4	6	274	645	1051	1253	861	1004		440	340	53	6094
1906-07	0	1	70	210	488	1244	1176	1023	940	387	276	35	4443
1907-08	0	1	70	210	488	1244	1176	1023	940	387	276	35	4443
1908-09	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1909-10	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1910-11	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1911-12	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1912-13	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1913-14	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1914-15	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1915-16	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1916-17	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1917-18	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1918-19	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1919-20	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1920-21	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1921-22	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1922-23	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1923-24	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1924-25	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1925-26	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1926-27	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1927-28	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1928-29	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1929-30	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1930-31	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1931-32	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1932-33	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1933-34	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1934-35	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1935-36	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1936-37	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1937-38	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1938-39	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1939-40	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1940-41	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1941-42	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1942-43	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1943-44	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1944-45	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1945-46	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1946-47	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1947-48	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1948-49	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1949-50	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1950-51	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1951-52	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1952-53	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1953-54	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1954-55	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1955-56	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1956-57	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1957-58	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1958-59	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1959-60	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1960-61	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1961-62	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1962-63	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1963-64	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1964-65	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1965-66	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1966-67	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1967-68	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1968-69	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1969-70	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1970-71	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1971-72	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1972-73	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1973-74	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1974-75	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1975-76	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1976-77	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1977-78	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1978-79	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1979-80	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1980-81	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1981-82	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1982-83	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1983-84	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1984-85	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1985-86	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1986-87	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1987-88	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1988-89	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1989-90	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1990-91	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1991-92	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1992-93	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1993-94	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1994-95	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1995-96	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1996-97	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1997-98	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1998-99	0	0	96	291	645	780	991	1381	1359	927	473	21	4647
1999-00	0	0	96	291									

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "p" denotes partial record, i.e. less than 10 days record missing.



STATION NO OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WIND NUMBER	
14855		Glenview, Illinois		42°05'N		87°50'W		653		KNBU			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office located in operations building	Navy	1948	1964	42°05'N	87°50'W	645	Mercurial	24				
2.	Weather service office	"	1964	1966	"	"	"	"	24				
3.	"	"	1966	1975	"	"	"	"	24				
1a.	"	"	1963	1972	"	"	648	Aneroid	24				
2a.	"	"	1972		"	"	"	"	24				

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1948	Roof of control tower atop operations building	Selsyn	Triple	1. Barograph (ML-3) 2. Semi-auto met sta (AN/GMQ-14B) 3. Ceiling light (ML-121) 4. Theodolite
2.	1954	Atop building #1, southeast corner	"	"	5. Transmissometer (AN/GMQ-10C) 6. Radar Recorder (RO 415/GMH 6)
3.	1958	Selsyn replaced by Aerovane and moved to NE section of runways 17-35 and 07-25, 3000' N of weather office	UMQ-5C	RD-108B	7. RVR computer (CV 2062/GMQ 10) 8. Cloud height set (GMQ 13C)
4.	1975	Moved to 1030 feet ENE of weather office adjacent to taxiway, west of runway 17-35	"	"	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

U.S. Naval Air Station Guantanamo Bay is located on the southeastern end of the south coast of Cuba. The bay is approximately a mile and a half wide. Mountains encompass the bay from the west through north to the east. The mountains east of the base are a barrier to the prevailing easterly trade winds.

The station's lee side location is reflected in many of its climatic characteristics such as; a higher mean temperature in the summer and a lower mean temperature in the winter than on the windward side of the mountains; a larger temperature range, both daily and annually and less total precipitation than on the windward side. Other climatic characteristics include having only two seasons. From November to May periodic surges of continental air move over the area. This is the winter season. Before the days of the weather satellites it was thought that frontal passages in the tropics were extremely rare. It is quite apparent from available satellite data that frontal passages are a winter characteristic of the "Gitmo" area. Maritime air dominates from June to October. Nearly one-fourth of the total average annual precipitation of 24

inches falls during the month of October. There is a secondary rainfall maximum during May. The total rainfall for any particular month or year may be quite inconsistent with the average monthly or annual totals. Precipitation usually falls in the form of showers from cumuliiform clouds.

Guantanamo Bay is normally under the easterly flow found in the trade winds belt. The sea breeze during the afternoon is from the southeast reflecting the dominance of the trade winds. A few hours after sunset the wind backs to a northerly direction with the onset of the land breeze.

The rhythm of the trade winds weather is interrupted occasionally by a tropical disturbance. During the past 33 years, however, hurricane force winds have been recorded only twice at this station. The mountainous barrier of Hispaniola and eastern Cuba provide a protective screen from the fury of the major tropical storms. These storms are the exception. The rule is for excellent flying weather to prevail 99% of the time.

GUANTANAMO BAY, CUBA



STATION NAME: GUANTANAMO BAY, CUBA  
LOCATION: 1 N 10 54 W 75 09  
STN LTR: HUGH  
MEAN S: 13706  
WMO # : 73367

PERIOD: APR 49-DEC 77  
ELEV: 51

PREPARED BY: NWS ASHEVILLE  
JUNE 1978

TEMPERATURE		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUMIDITY		WIND		SPEED		PRESS		SPEC		MIN		MAX		DEG		F		MIN	
DAILY		MEAN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
JAN		68		76		95		57		1.0		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
FEB		68		76		92		57		1.0		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
MAR		68		76		92		57		1.0		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
APR		68		76		94		63		1.2		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
MAY		68		74		81		66		1.2		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
JUN		68		75		83		68		2.2		17.6		0.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
JUL		68		76		84		100		1.0		2.2		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
AUG		68		76		84		100		1.0		2.2		1.6		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
SEP		68		76		83		97		1.8		13.4		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
OCT		68		75		82		98		1.9		19.8		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
NOV		68		72		80		93		1.5		17.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
DEC		68		70		77		93		1.0		10.3		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
ANN		68		73		80		100		24.1		19.8		0.3		0.0		0.0		0.0		0.0		0.0		0.0		0.0	
EVR		33		33		33		33		33		33		33		20		20		20		20		20		20		20	

REMARKS: DATA NOT AVAILABLE. # LESS THAN 0.05 DAY, 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE. THE VALUE LISTED UNDER "PRESS ALT FEET 99.99" INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME. EVR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, FOR).

CEILING		01	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1949	353	268	380	356	463	478	523	327	528	472	396	333	4,749
1950	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1951	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1952	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1953	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1954	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1955	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1956	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1957	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1958	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1959	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1960	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1961	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1962	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1963	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1964	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1965	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1966	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1967	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1968	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1969	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1970	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1971	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1972	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1973	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1974	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1975	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1976	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1977	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1978	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1979	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1980	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1981	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1982	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1983	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1984	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1985	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1986	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1987	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1988	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1989	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1990	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1991	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1992	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1993	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1994	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1995	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1996	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1997	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1998	366	280	360	356	458	478	544	351	408	316	397	398	5,157
1999	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2000	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2001	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2002	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2003	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2004	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2005	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2006	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2007	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2008	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2009	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2010	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2011	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2012	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2013	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2014	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2015	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2016	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2017	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2018	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2019	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2020	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2021	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2022	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2023	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2024	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2025	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2026	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2027	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2028	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2029	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2030	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2031	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2032	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2033	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2034	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2035	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2036	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2037	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2038	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2039	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2040	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2041	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2042	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2043	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2044	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2045	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2046	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2047	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2048	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2049	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2050	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2051	366	280	360	356	458	478	544	351	408	316	397	398	5,157
2052	366	280	360	3									

## MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec.	Annual
1962	76.5	76.7	76.8	77.2 <sup>6</sup>	76.6	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1963	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1964	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1965	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1966	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1967	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1968	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1969	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1970	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1971	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1972	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1973	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1974	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1975	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1976	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1977	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1978	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1979	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1980	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1981	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1982	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1983	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1984	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1985	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1986	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1987	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1988	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1989	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1990	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1991	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1992	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1993	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1994	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1995	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1996	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1997	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1998	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
1999	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2000	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2001	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2002	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2003	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2004	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2005	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2006	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2007	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2008	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2009	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2010	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2011	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2012	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2013	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2014	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2015	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2016	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2017	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2018	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2019	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2020	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2021	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2022	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2023	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2024	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2025	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2026	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2027	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2028	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2029	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2030	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2031	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2032	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2033	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2034	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2035	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2036	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2037	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2038	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2039	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2040	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2041	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2042	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2043	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2044	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2045	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2046	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2047	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2048	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2049	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2050	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2051	76.5	76.7	76.8	76.5	76.9	81.3 <sup>6</sup>	81.7	81.6	82.2	78.9	77.6	78.3	78.9
2052	76.5	76.7	76.8	76.5									

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

cord; "P" denotes partial record, i.e. less than 10 days record missing. Partial monthly values were not included in means.



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
11706		Guantanamo Bay, Cuba		19° 54' N		75° 09' W		51		MUGM		78367	
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BANG LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Second deck of land plane hangar at McCalla Field	NAS		1953	19° 54' N	75° 09' W	65.9	Mercurial	24				
2.	First deck of the land plane hangar McCalla Field	"	1953	1966	"	"	53.8	"	24				
3.	Second deck of bldg. AV-32 on the second floor	"	1966	1976	"	"	69.1	"	24				
1a.	NWSED (AV-32)	"	1966	1972	"	"	71.3	Aneroid	24				
2a.	" (new ML-448/UM)	"	1972	1976	"	"	"	"	24				
3a.	NWSED (AV-600)	"	1976		"	"	66.0	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HIT ABOVE GROUND	
1.		Main roof of the land plane hangar	AN/UMQ-5		58'	1. Barograph (ML-3A)
2.	1962	Approximately 1300' from north end of McCalla runway (01-09) and 500' west of centerline	AN/UMQ-5C	RD-108C	19'	2. Theodolite (ML-427) 3. Radiosonde/Rawinsonde set (AN-GMD-1B) 4. APT (GRK-7)
3.	1976	Approximately 1200 yds from east end of runway 27, 160 yds north of center line	AN/UMQ-5	"	56' MSL	5. Rain Gauge (ML 217)
3a.	1977	Located on mast above AV-150	"	none	144' MSL	6. Electric psychrometer (ML 450)

NWSD, Federal Building  
Asheville, N. C.



AD-A076 976

NAVAL OCEANOGRAPHY COMMAND DETACHMENT ASHEVILLE NC

F/G 4/2

U.S. NAVY AND MARINE CORPS METEOROLOGICAL STATION CLIMATIC SUMM--ETC(U)

OCT 79

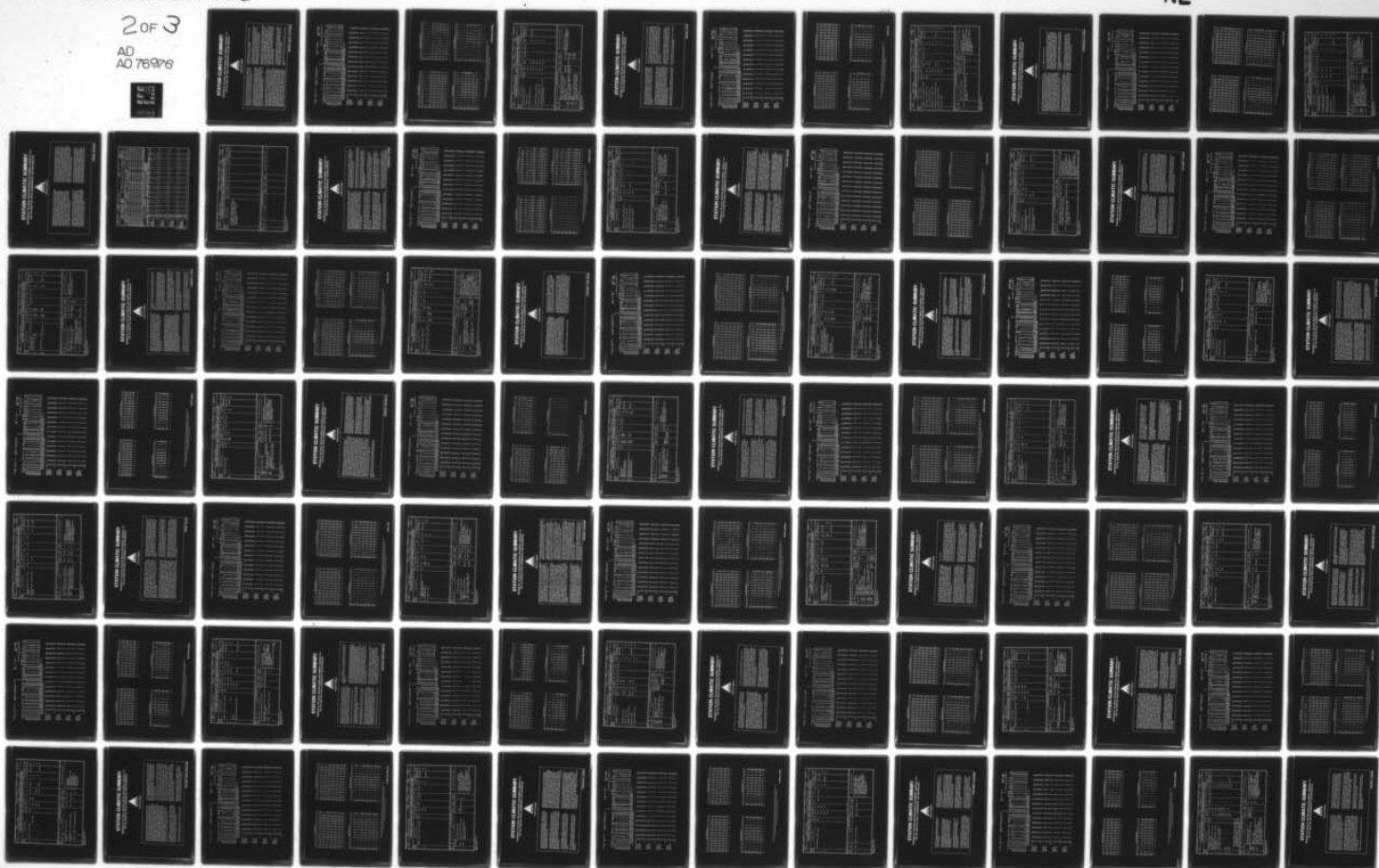
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# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Outlying Landing Field, Imperial Beach, California is located on a coastal plain in the extreme southwestern section of the state. The Pacific Ocean is one mile west and the Mexican border 2 miles south. The city of San Diego is 15 miles north.

Imperial Beach is characterized by a sub-tropical climate with very dry summers and rain occurring during the winter season. The most significant precipitation amounts occur in November, December, January, and February. The dry season extends from May through October. On rare occasions an extra-tropical storm may move into this area in late August or September from the south, bringing moderate east to southeast winds and heavy rainfall.

The station is subject to daily land and sea breezes. The sea breeze commences 2 to 4 hours after sunrise and is experienced as a westerly wind with an average speed of 10 knots. Land breezes normally begin 2 to 4 hours after sunset and are generally lighter than sea breezes. The approach of a cold front may increase the local winds from the south or southwest and they may reach speeds of 30 to 40 knots. After the frontal passage the winds diminish at the station as they shift to the north or northwest even though offshore they may continue to maintain speeds in excess of 30 knots. When "Santa Ana" winds occur, normally during the fall and winter months, there is a sharp increase in temperature as winds begin blowing from the Mojave Desert. The humidity may decrease to 15% or less. Winds gen-

erally are sustained at 18 to 24 knots with gusts in excess of 30 knots from the east or southeast.

Thunderstorms at the station in the summer are infrequent and usually very weak. They occur with greatest frequency in the interior and are usually confined to the higher mountains and southeastern desert areas. During the winter they are rare but sometimes accompany cold frontal passages.

Flying conditions in the local area are generally excellent throughout the year. Visual Flight Rules (VFR) may be expected to prevail at the station on an average of 86% of the time in all seasons. Conditions over the operating area to seaward and the mountainous areas inland are somewhat less favorable. The most important weather phenomena, from a flying standpoint, is the frequent stratus and fog conditions along the Southern California coast. These conditions occur most frequently and over extended periods during the summer.

A local phenomena called the Catalina Eddy has a critical effect on fog and stratus along the coast from Santa Barbara to the Mexican border. The stratus layer is carried farther north and inland than would normally be expected.

Snow has been recorded once. A trace was observed in December 1967.

IMPERIAL BEACH, CALIFORNIA



STN LTRS: KNRS  
WBAN # : 93115  
WMO # : 1

MEAN NUMBER OF DAYS OF

[illegible]

FLYING WEA & HRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	01	31	34	30	48	67	85	88	86	60	46	34	23	51	13
LESS 5000	04	30	35	45	56	75	90	83	77	63	49	36	29	56	15
FT AND/OR	07	31	38	49	58	78	86	81	79	64	52	34	29	58	29
VISIBILITY	10	24	28	37	47	47	50	37	31	34	32	24	23	29	29
LESS 5 MI	13	18	21	24	23	31	37	21	20	24	20	19	20	23	26
	16	18	22	26	29	38	42	24	21	21	24	19	19	23	23
	19	25	32	36	45	51	52	32	28	28	26	23	26	32	41
	22	28	38	45	56	67	67	42	41	43	38	31	32	41	16
ALL HRS	25	35	35	40	53	60	60	46	42	40	35	26	25	38	22
CEILING	01	9	9	9	10	8	22	24	20	18	15	12	13	14	13
LESS 1000	04	9	9	13	14	13	26	33	32	24	17	13	10	18	15
FT AND/OR	07	11	11	12	13	16	27	33	32	24	20	11	9	19	28
VISIBILITY	10	6	6	8	7	8	13	15	13	11	10	6	7	9	29
LESS 3 MI	13	4	5	7	6	5	9	7	6	6	6	6	6	6	26
	16	5	6	6	6	6	9	7	6	6	6	7	7	7	23
	19	7	7	5	5	9	11	10	6	6	4	7	8	9	16
	22	7	7	8	6	9	14	12	10	13	11	8	12	11	22
ALL HRS	7	7	8	8	9	9	15	17	15	13	11	8	8	11	22
CEILING	01	4	4	3	4	1	2	2	1	2	7	5	8	3	13
LESS 200	04	4	3	4	3	2	2	2	2	4	6	5	5	4	13
FT AND/OR	07	6	6	4	3	3	2	2	2	1	2	3	4	4	28
VISIBILITY	10	2	2	2	3	2	1	0	1	1	2	3	3	2	29
LESS 1/2 MI	13	2	2	2	3	2	2	0	1	2	3	3	3	2	26
	16	2	2	2	3	2	2	1	1	1	2	3	3	2	23
	19	3	2	2	2	2	2	1	1	1	2	3	4	2	16
	22	3	2	2	1	2	2	0	0	1	4	4	4	2	22
ALL HRS	3	3	3	3	3	2	12	1	1	2	4	4	4	2	22
CEILING	01	3	3	2	3	1	1	1	1	1	6	4	6	2	13
LESS 100	04	4	2	3	3	2	1	1	1	2	5	4	4	3	18
FT AND/OR	07	4	4	3	2	3	1	1	1	1	5	4	3	3	28
VISIBILITY	10	2	2	2	2	2	2	0	2	1	2	3	3	2	29



## MEAN TEMPERATURE °F

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1964	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1965	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1966	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1967	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1968	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1969	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1970	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1971	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1972	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1973	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1974	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1975	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1976	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1977	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1978	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1979	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1980	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1981	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1982	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1983	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1984	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1985	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1986	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1987	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1988	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1989	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1990	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1991	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1992	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M
1993	51.9P	50.3P	54.0P	55.2	55.3	53.6	66.7P	69.3	68.5	63.4	56.9P	55.2	M

## TOTAL PRECIPITATION INCHES

[illegible]

## HEATING DEGREE DAYS

Season	Jan.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1894-95	0	0	10	22	299	0	0	0	0	284	0	37	37
1895-96	0	0	0	0	0	0	0	0	0	0	162	0	162
1896-97	0	0	0	0	0	0	0	0	0	0	0	0	0
1897-98	5	0	2	75	269	0	0	0	0	214	145	53	53
1898-99	25	0	0	0	0	0	0	0	0	0	0	0	0
1900-01	0	0	0	0	0	0	0	0	0	0	0	0	0
1901-02	0	0	0	0	0	0	0	0	0	0	0	0	0
1902-03	0	0	0	0	0	0	0	0	0	0	0	0	0
1903-04	0	0	0	0	0	0	0	0	0	0	0	0	0
1904-05	0	0	0	0	0	0	0	0	0	0	0	0	0
1905-06	0	0	0	0	0	0	0	0	0	0	0	0	0
1906-07	0	0	0	0	0	0	0	0	0	0	0	0	0
1907-08	0	0	0	0	0	0	0	0	0	0	0	0	0
1908-09	0	0	0	0	0	0	0	0	0	0	0	0	0
1909-10	0	0	0	0	0	0	0	0	0	0	0	0	0
1910-11	0	0	0	0	0	0	0	0	0	0	0	0	0
1911-12	0	0	0	0	0	0	0	0	0	0	0	0	0
1912-13	0	0	0	0	0	0	0	0	0	0	0	0	0
1913-14	0	0	0	0	0	0	0	0	0	0	0	0	0
1914-15	0	0	0	0	0	0	0	0	0	0	0	0	0
1915-16	0	0	0	0	0	0	0	0	0	0	0	0	0
1916-17	0	0	0	0	0	0	0	0	0	0	0	0	0
1917-18	0	0	0	0	0	0	0	0	0	0	0	0	0
1918-19	0	0	0	0	0	0	0	0	0	0	0	0	0
1919-20	0	0	0	0	0	0	0	0	0	0	0	0	0
1920-21	0	0	0	0	0	0	0	0	0	0	0	0	0
1921-22	0	0	0	0	0	0	0	0	0	0	0	0	0
1922-23	0	0	0	0	0	0	0	0	0	0	0	0	0
1923-24	0	0	0	0	0	0	0	0	0	0	0	0	0
1924-25	0	0	0	0	0	0	0	0	0	0	0	0	0
1925-26	0	0	0	0	0	0	0	0	0	0	0	0	0
1926-27	0	0	0	0	0	0	0	0	0	0	0	0	0
1927-28	0	0	0	0	0	0	0	0	0	0	0	0	0
1928-29	0	0	0	0	0	0	0	0	0	0	0	0	0
1929-30	0	0	0	0	0	0	0	0	0	0	0	0	0
1930-31	0	0	0	0	0	0	0	0	0	0	0	0	0
1931-32	0	0	0	0	0	0	0	0	0	0	0	0	0
1932-33	0	0	0	0	0	0	0	0	0	0	0	0	0
1933-34	0	0	0	0	0	0	0	0	0	0	0	0	0
1934-35	0	0	0	0	0	0	0	0	0	0	0	0	0
1935-36	0	0	0	0	0	0	0	0	0	0	0	0	0
1936-37	0	0	0										

**COOLING DEGREE DAYS**

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Nov.	Dec.	Total
944	M	M	O	O	O	2	4	142	121	49	1	7
945	M	M	M	12	O	M	7	59	M	M	M	1
946	M	M	M	4	M	M	9	39	M	M	M	1
947	M	M	M	M	M	M	M	M	M	M	M	1
948	M	M	M	M	M	M	M	M	M	M	M	1
949	M	M	M	M	M	M	M	M	M	M	M	1
950	M	M	M	M	M	M	M	M	M	M	M	1
951	M	M	M	M	M	M	M	M	M	M	M	1
952	M	M	M	M	M	M	M	M	M	M	M	1
953	M	M	M	M	M	M	M	M	M	M	M	1
954	M	M	M	M	M	M	M	M	M	M	M	1
955	M	M	M	M	M	M	M	M	M	M	M	1
956	O	O	O	O	21	12	71	92	51	24	O	320
957	O	O	O	O	1	4	18	134	149	130	O	405
958	O	O	O	O	2	46	182	184	137	23	O	400
959	O	O	O	O	2	2	106	138	134	29	O	413
960	O	O	O	O	2	4	99	133	51	50	O	332
961	O	O	O	O	2	4	97	132	50	4	O	349
962	O	O	O	O	2	4	101	135	50	4	O	349
963	O	O	O	O	2	4	107	134	50	4	O	354
964	O	O	O	O	2	4	107	134	50	4	O	354
965	O	O	O	O	2	4	107	134	50	4	O	354
966	O	O	O	O	2	4	107	134	50	4	O	354
967	O	O	O	O	2	4	107	134	50	4	O	354
968	O	O	O	O	2	4	107	134	50	4	O	354
969	O	O	O	O	2	4	107	134	50	4	O	354
970	O	O	O	O	2	4	107	134	50	4	O	354
971	O	O	O	O	2	4	107	134	50	4	O	354
972	O	O	O	O	2	4	107	134	50	4	O	354
973	O	O	O	O	2	4	107	134	50	4	O	354
974	O	O	O	O	2	4	107	134	50	4	O	354
975	O	O	O	O	2	4	107	134	50	4	O	354
976	O	O	O	O	2	4	107	134	50	4	O	354
977	O	O	O	O	2	4	107	134	50	4	O	354
978	O	O	O	O	2	4	107	134	50	4	O	354
979	O	O	O	O	2	4	107	134	50	4	O	354
980	O	O	O	O	2	4	107	134	50	4	O	354
981	O	O	O	O	2	4	107	134	50	4	O	354
982	O	O	O	O	2	4	107	134	50	4	O	354
983	O	O	O	O	2	4	107	134	50	4	O	354
984	O	O	O	O	2	4	107	134	50	4	O	354
985	O	O	O	O	2	4	107	134	50	4	O	354
986	O	O	O	O	2	4	107	134	50	4	O	354
987	O	O	O	O	2	4	107	134	50	4	O	354
988	O	O	O	O	2	4	107	134	50	4	O	354
989	O	O	O	O	2	4	107	134	50	4	O	354
990	O	O	O	O	2	4	107	134	50	4	O	354
991	O	O	O	O	2	4	107	134	50	4	O	354

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

cord; "p" denotes partial record, i.e. less than 10 days record missing. Partial monthly values were not included in means.



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93115		Imperial Beach, California		32° 34' N		117° 07' W		23		KNRS			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	Navy	1951	1968	32° 34' N	117° 07' W	28	Aneroid	Var				
2.	Weather office	"	1968		"	"		"	"				
1a.	Weather service office	"	1955	1956	"	"	29	Mercurial	"				
2a.	"	"	1956	1963	"	"	27	"	"				
3a.	Inside bulkhead of ops bldg	"	1963	1968	"	"	27	"	"				
4a.	West wall in weather office	"	1968	1968	"	"	21	"	"				
5a.	*New ML-512/GM installed west wall in weather office 12/69	"	1969	1976	"	"	21	"	"				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		NOTE: Wind vane oriented 30° west of true North prior to 12/20/55. Mounted on roof of operation control tower	AN/UMQ-5B		50' MSL	1. Barograph (open scale)
2.	1955	Top control tower (new transmitter)	AN/UMQ-5B	RD-108B	50' MSL	2. Semi-auto met sta (AN/GMQ-14B)
3.	1962	Adjacent to runway 09R (2200 WSW of operations building)	AN/UMQ-5C	"	31' MSL	3. Cloud height set (AN/GMQ-13)
4.	1966	Same	"	"	23' MSL	
5.	1968	*Adjacent to runway 09R (4280' WSW of ops bldg) (new ops bldg 8/26/68)	"	"	23' MSL	
6.	1968	Adjacent to runway 09R, 4280' WSW of ops bldg	"	"	9'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station Iwakuni is located on the southwestern section of the island of Honshu, Japan, approximately 19 miles south - southwest of Hiroshima. The station is built on a delta bounded on the east and south by the Inland Sea, to the north by the Imazu River and to the west and southwest by the Monzen River.

The combination of hills in close proximity to the station on the west and the large body of water within one-half mile of the runway to the east has a significant effect on the local climate. Air drainage down the valley and across the delta produces prevailing night wind from the west-northwest at 3 to 7 knots. During the late spring, summer, and early autumn, a daily sea breeze from the southeast is observed from mid-morning to shortly after sunset. During the winter, the hills protect the station from the severity of Arctic and Polar outbreaks.

Iwakuni experiences two seasonal weather regimes and two transitional periods. The winter season is November to mid-May and

the summer season is late June or early July to late September.

The mean annual precipitation is 65.2 inches with the greatest amounts falling during June and July. The month of December has the lowest mean monthly precipitation. The average number of days with a measurable amount of precipitation is 121 days annually. Thunderstorms occur on an average of 13 days out of the year. Snow may fall from November through March, but the amounts are small and much of the snow melts upon contact with the surface.

Fog occurs most frequently during June. Smoke will create a visibility problem with a northeast wind during the early morning hours on 7 to 9 days a month throughout the year, this is due to the heavy industrial area to the northeast of the station.

The most frequently occurring wind direction is west-northwest. Iwakuni generally has good flying weather.

IWAKUNI, JAPAN



STN LYRS: RJOI  
WGAN # : 68324  
WMO # : 67764

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## TOTAL PRECIPITATION INCHES

[illegible]

**COOLING DEGREE DAYS**

[illegible]

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Oct.	Nov.	Dec.	Annual
1934	W	1	N	N	N	N	N	N	N	51.2	49.4	51
1935	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1936	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1937	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1938	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1939	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1940	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1941	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1942	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1943	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1944	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1945	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1946	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1947	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1948	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1949	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1950	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1951	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1952	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1953	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1954	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1955	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1956	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1957	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1958	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1959	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1960	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1961	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1962	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1963	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1964	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1965	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1966	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1967	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1968	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1969	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1970	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1971	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1972	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1973	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1974	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1975	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1976	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1977	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1978	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1979	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1980	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1981	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1982	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1983	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1984	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1985	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1986	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1987	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1988	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1989	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1990	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1991	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1992	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1993	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1994	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1995	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1996	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1997	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1998	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
1999	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2000	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2001	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2002	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2003	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2004	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2005	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2006	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2007	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2008	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2009	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2010	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2011	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2012	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2013	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2014	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2015	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2016	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2017	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2018	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2019	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2020	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2021	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2022	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2023	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2024	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2025	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2026	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2027	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2028	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2029	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2030	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2031	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2032	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2033	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2034	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2035	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2036	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2037	W	40.3	40.3	37.7	37.7	37.9	37.6	37.6	37.6	37.6	37.6	37.6
2038	W	40.3	40.3	37.7	37.7	37.9						

## HEATING DEGREE DAYS

Stations	Jul	Aug	Sept	Oct	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
33-34	0	0	0	0	0	0	0	0	0	0	0	0	0
34-35	0	0	0	0	0	0	0	0	0	0	0	0	0
35-36	0	0	0	0	0	0	0	0	0	0	0	0	0
36-37	0	0	0	0	0	0	0	0	0	0	0	0	0
37-38	0	0	0	0	0	0	0	0	0	0	0	0	0
38-39	0	0	0	0	0	0	0	0	0	0	0	0	0
39-40	0	0	0	0	0	0	0	0	0	0	0	0	0
40-41	0	0	0	0	0	0	0	0	0	0	0	0	0
41-42	0	0	0	0	0	0	0	0	0	0	0	0	0
42-43	0	0	0	0	0	0	0	0	0	0	0	0	0
43-44	0	0	0	0	0	0	0	0	0	0	0	0	0
44-45	0	0	0	0	0	0	0	0	0	0	0	0	0
45-46	0	0	0	0	0	0	0	0	0	0	0	0	0
46-47	0	0	0	0	0	0	0	0	0	0	0	0	0
47-48	0	0	0	0	0	0	0	0	0	0	0	0	0
48-49	0	0	0	0	0	0	0	0	0	0	0	0	0
49-50	0	0	0	0	0	0	0	0	0	0	0	0	0
50-51	0	0	0	0	0	0	0	0	0	0	0	0	0
51-52	0	0	0	0	0	0	0	0	0	0	0	0	0
52-53	0	0	0	0	0	0	0	0	0	0	0	0	0
53-54	0	0	0	0	0	0	0	0	0	0	0	0	0
54-55	0	0	0	0	0	0	0	0	0	0	0	0	0
55-56	0	0	0	0	0	0	0	0	0	0	0	0	0
56-57	0	0	0	0	0	0	0	0	0	0	0	0	0
57-58	0	0	0	0	0	0	0	0	0	0	0	0	0
58-59	0	0	0	0	0	0	0	0	0	0	0	0	0
59-60	0	0	0	0	0	0	0	0	0	0	0	0	0
60-61	0	0	0	0	0	0	0	0	0	0	0	0	0
61-62	0	0	0	0	0	0	0	0	0	0	0	0	0
62-63	0	0	0	0	0	0	0	0	0	0	0	0	0
63-64	0	0	0	0	0	0	0	0	0	0	0	0	0
64-65	0	0	0	0	0	0	0	0	0	0	0	0	0
65-66	0	0	0	0	0	0	0	0	0	0	0	0	0
66-67	0	0	0	0	0	0	0	0	0	0	0	0	0
67-68	0	0	0	0	0	0	0	0	0	0	0	0	0
68-69	0	0	0	0	0	0	0	0	0	0	0	0	0
69-70	0	0	0	0	0	0	0	0	0	0	0	0	0
70-71	0	0	0	0	0	0	0	0	0	0	0	0	0
71-72	0	0	0	0	0	0	0	0	0	0	0	0	0
72-73	0	0	0	0	0	0	0	0	0	0	0	0	0
73-74	0	0	0	0	0	0	0	0	0	0	0	0	0
74-75	0	0	0	0	0	0	0	0	0	0	0	0	0
75-76	0	0	0	0	0	0	0	0	0	0	0	0	0
76-77	0	0	0	0	0	0	0	0	0	0	0	0	0
77-78	0	0	0	0	0	0	0	0	0	0	0	0	0
78-79	0	0	0	0	0	0	0	0	0	0	0	0	0
79-80	0	0	0	0	0	0	0	0	0	0	0	0	0
80-81	0	0	0	0	0	0	0	0	0	0	0	0	0
81-82	0	0	0	0	0	0	0	0	0	0	0	0	0
82-83	0	0	0	0	0	0	0	0	0	0	0	0	0
83-84	0	0	0	0	0	0	0	0	0	0	0	0	0
84-85	0	0	0	0	0	0	0	0	0	0	0	0	0
85-86	0	0	0	0	0	0	0	0	0	0	0	0	0
86-87	0	0	0	0	0	0	0	0	0	0	0	0	0
87-88	0	0	0	0	0	0	0	0	0	0	0	0	0
88-89	0	0	0	0	0	0	0	0	0	0	0	0	0
89-90	0	0	0	0	0	0	0	0	0	0	0	0	0
90-91	0	0	0	0	0	0	0	0	0	0	0	0	0
91-92	0	0	0	0	0	0	0	0	0	0	0	0	0
92-93	0	0	0	0	0	0	0	0	0	0	0	0	0
93-94	0	0	0	0	0	0	0	0	0	0	0	0	0
94-95	0	0	0	0	0	0	0	0	0	0	0	0	0
95-96	0	0	0	0	0	0	0	0	0	0	0	0	0
96-97	0	0	0	0	0	0	0	0	0	0	0	0	0
97-98	0	0	0	0	0	0	0	0	0	0	0	0	0
98-99	0	0	0	0	0	0	0	0	0	0	0	0	0
99-00	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
43324		Iwakuni, Japan		34°09'N		132°14'E		8		RJOI		47764	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather office (operations bldg)	NS		1962	34°09'N	132°14'E	10	Mercurial	24				
2.	Relocated in weather office	MCAF	1962	1964	"	"	9.4	"	24				
3.	New barometer installed	"	1964	1966	"	"	9.4	"	24				
4.	Relocated in weather office	"	1966		"	"	9.4	"	24				
1a.	Weather office (operations bldg)	"	1962	1966	"	"	12	Aneroid	24				
2a.	Mounted in GMQ-14B cabinet	"	1966	1972	"	"	12	"	24				
3a.	GMQ-14B cabinet	"	1972		"	"	12	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		Roof of operations building	AN/UMQ-5	none	58' MSL	1. Barograph (ML 3) 2. Semi-auto met sta (AN/GMQ-14B) 3. Ceiling light (ML-121) 4. Cloud height set (RO-121/GMQ-13) 5. Theodolite (ML-474) 6. Transmissometer (1D-820/GMQ-10C) 7. Rain gauge (ML 217) 8. APT (GRK-7)
2.	1958	855' west of the runway center line and 3800' north of the south end of the runway	AN/UMQ-5C RD-108B		20' MSL	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station, Jacksonville, Florida is located on the west bank of the St. Johns River, about 14 miles inland from the Atlantic Ocean and 5.5 miles south of the city of Jacksonville. The surrounding terrain is nearly level with an average elevation of 30 feet. Easterly and southerly winds blowing about 50% of the time produce a maritime influence that modifies to some extent the heat of summer and the cold of winter. The station seldom experiences strong winds or severe cold waves. Exceptional weather at Naval Air Station Jacksonville is occasioned by infrequent "Noreasters" along the northeast Florida coast marked by winds 20 - 30 knots, low stratus clouds, and drizzle. These occur mainly during the winter and sometimes persist for several days.

Good flying conditions (VFR) are experienced 92% of the time. The months of lowest percentage of VFR conditions are December and January with 85%. Contributing factors to these two months are "Nor-easters" and stalling cold fronts that create low stratus, light rain and/or drizzle along with fog. During the period of April through September, marginal flying conditions rarely oc-

cur for periods in excess of an hour.

June, July, August, and September are the hottest months with mean temperatures averaging near 80 degrees F. December, January, and February are the coolest months, with mean temperatures near 58 degrees F. On hot days, either an afternoon thunderstorm or a southeasterly sea breeze usually reaches this area about midday. Night temperatures in summer are usually comfortable, very rarely failing to drop below 80 degrees F.

Rainshowers associated with thunderstorms supply the majority of the precipitation for this area. Snow has been observed but is very rare.

Prevailing wind direction is north in the autumn and winter months and south and east in spring and summer. Most hurricanes reaching this latitude tend to move parallel to the coastline, keeping well out to sea, or to lose much of their force moving over land before reaching this area.

JACKSONVILLE, FLORIDA







## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1900	2.07	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1901	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1902	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1903	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1904	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1905	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1906	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1907	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1908	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1909	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1910	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1911	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1912	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1913	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1914	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1915	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1916	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1917	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1918	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1919	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1920	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1921	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1922	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1923	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1924	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1925	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1926	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1927	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1928	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20
1929	2.06	1.00	1.25	1.77	1.79	1.57	5.86	10.21	6.25	2.93	1.59	7.04	32.20

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1948	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1949	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1950	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1951	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1952	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1953	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1954	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1955	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1956	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1957	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1958	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1959	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1960	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1961	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1962	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1963	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1964	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1965	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1966	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1967	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1968	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1969	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1970	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1971	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1972	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1973	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1974	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1975	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1976	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1977	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1978	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1979	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
1980	28.0	32.8	32.8	36.2	38.0	38.0	38.0	37.7	38.7	37.7	40.0	40.8	78.0
MEAN	56.5	46.5	46.5	70.5	76.4	80.7	82.5	82.5	79.7	71.9	63.5	57.2	70.5

## HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
1844-45	0	0	0	0	13	113	260	110	5	13	2	0	10
1845-46	0	0	0	0	13	113	260	110	5	13	2	0	10
1846-47	0	0	0	0	13	113	260	110	5	13	2	0	10
1847-48	0	0	0	0	13	113	260	110	5	13	2	0	10
1848-49	0	0	0	0	13	113	260	110	5	13	2	0	10
1849-50	0	0	0	0	13	113	260	110	5	13	2	0	10
1850-51	0	0	0	0	13	113	260	110	5	13	2	0	10
1851-52	0	0	0	0	13	113	260	110	5	13	2	0	10
1852-53	0	0	0	0	13	113	260	110	5	13	2	0	10
1853-54	0	0	0	0	13	113	260	110	5	13	2	0	10
1854-55	0	0	0	0	13	113	260	110	5	13	2	0	10
1855-56	0	0	0	0	13	113	260	110	5	13	2	0	10
1856-57	0	0	0	0	13	113	260	110	5	13	2	0	10
1857-58	0	0	0	0	13	113	260	110	5	13	2	0	10
1858-59	0	0	0	0	13	113	260	110	5	13	2	0	10
1859-60	0	0	0	0	13	113	260	110	5	13	2	0	10
1860-61	0	0	0	0	13	113	260	110	5	13	2	0	10
1861-62	0	0	0	0	13	113	260	110	5	13	2	0	10
1862-63	0	0	0	0	13	113	260	110	5	13	2	0	10
1863-64	0	0	0	0	13	113	260	110	5	13	2	0	10
1864-65	0	0	0	0	13	113	260	110	5	13	2	0	10
1865-66	0	0	0	0	13	113	260	110	5	13	2	0	10
1866-67	0	0	0	0	13	113	260	110	5	13	2	0	10
1867-68	0	0	0	0	13	113	260	110	5	13	2	0	10
1868-69	0	0	0	0	13	113	260	110	5	13	2	0	10
1869-70	0	0	0	0	13	113	260	110	5	13	2	0	10
1870-71	0	0	0	0	13	113	260	110	5	13	2	0	10
1871-72	0	0	0	0	13	113	260	110	5	13	2	0	10
1872-73	0	0	0	0	13	113	260	110	5	13	2	0	10
1873-74	0	0	0	0	13	113	260	110	5	13	2	0	10
1874-75	0	0	0	0	13	113	260	110	5	13	2	0	10
1875-76	0	0	0	0	13	113	260	110	5	13	2	0	10
1876-77	0	0	0	0	13	113	260	110	5	13	2	0	10
1877-78	0	0	0	0	13	113	260	110	5	13	2	0	10

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93837		Jacksonville, Florida		30°14'N		81°40'W		22		KNIP			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, second deck of operations building	Navy	1950	1959	30°14'N	81°40'W	30	Mercurial	24				
2.	In old tower, two decks above roof of operations building	"	1959	1962	"	"	57	"	24				
3.	Weather service office, second deck of operations building	"	1962	1968	"	"	30	"	24				
4.	NWSF Building 118	"	1968	1976	"	"	41	"	24				
1a.	Weather service office	"			"	"	43.7	Aneroid	24				

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE	
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Unknown	Atop operations control tower, disassembled 1956.	Selsyn	Triple	82'	1. Barograph (marine)
2.	1955	Installed 18' above main roof on operations building	AN/UMQ-5	RD-108	40'	2. Auto met sta (AN/GMQ-29)
3.	1958	Atop operations control tower	"	"	70'	3. Ceiling light (ML-121)
4.	1960	On Tacan Bldg near center of field	"	"	22'	4. Cloud height set (AN/GMQ-13B)
5.	1977	Adjacent to southwest corner of Bldg 935 near center of field	AN/UMQ-5C	RO 447/	14'	5. Transmissometer (AN/GMQ-10C)
6.	1978	2000 ft NW of NAS TACAN	"	RO 447/	14'	6. Radar (AN/FPS-106)
				GMQ-29		7. Weather Vision (AN/GMQ-27)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Weather Service Environmental Detachment Kadena is located on Kadena Air Base on the island of Okinawa, Japan. Okinawa is the largest link in the Ryukyu Island chain which geographically separates the East China Sea from the Pacific Ocean. To the northeast lie the islands of mainland Japan; the Asiatic mainland is to the northwest. Taiwan is located to the west-southwest, and the Philippines are to the southwest, with the Pacific Ocean extending to the east. The Kuroshio current flows northward around Okinawa and modifies air masses so that extreme temperatures are not experienced.

The island is 67 miles long and varies from sixteen to two miles in width. The northern two-thirds is comprised of rugged mountains covered with lush forest vegetation; the average height of these mountains is 1500 feet. The southern third of the island consists of coral escarpments, cultivated patches, small rolling hills, with ridges oriented across the island. Practically the entire population, both civilian and military, live in the southern section.

Okinawa experiences two principal seasons, summer and winter, which are monsoonal in nature. The weather of a particular summer or winter depends on the intensity of the Pacific and Siberian pressure cells. The polar front or trough divides these two air masses. Okinawa experiences southerly winds and maritime tropical air in the summer and northerly winds with modified continental polar air in the winter. The continental polar air is greatly modified during its contact with the warm Kuroshio current. Spring and fall months are transitional months and the type of weather conditions that occur are variable.

The typhoon season for Okinawa begins in late May and lasts through November, with maximum occurrence during August and September. The number of tropical cyclones that affects Okinawa varies greatly from year to year. During an average year two tropical cyclones strike Okinawa with winds in excess of 50 knots; six to seven more approach near enough to produce inclement weather.

KADENA, OKINAWA



## AWS CLIMATIC BRIEF

[illegible]







# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station Kaneohe Bay, Hawaii is located on Mokapu Peninsula on the northern (windward) coast of the Island of Oahu. The peninsula is bounded by the Pacific Ocean to the north through east and by Kaneohe Bay to the west and south-west. Mokapu Peninsula is generally flat lowland covered by lush tropical growth and surrounded by narrow sandy beaches. Considerable swamp land exists on the southern boundary where the peninsula connects to the island land mass. A small extinct volcano crater rises to an elevation of 683 feet on the northeastern corner of the peninsula.

The range in normal temperature between the warmest month, September and the coolest month, February, averages only 6.0 degrees F. The average daily temperature range is also small. Maxima are usually in the high 70's or low 80's, minima in the high 60's or low 70's.

Because of the persistence and moderate humidity of the northeasterly trade winds, August and September are usually comfortable. Unpleasant weather is more likely later in autumn or early winter when the trades may diminish or give way to southerly winds. During these periods, known locally as "Kona Weather", the humidity may become oppressively high.

Hawaii experiences only two well defined seasons. The summer season runs from May through September and winter from Octo-

ber through April. Summer is characterized by a persistent flow of moderate to fresh northeasterly trades, partly cloudy skies and widely scattered light showers occurring mainly at night and a long windward coasts and near higher terrain.

Hawaii provides almost ideal flying weather the year around, with the exception of a few days each year, generally during the winter months.

Obstructions to vision on windward Oahu is nonexistent except during precipitation. Visibility on the leeward side of the island is sometimes reduced slightly due to industrial smoke or the burning of sugarcane fields.

The mean annual precipitation of MCAS Kaneohe Bay is about 38 inches. The months of October through April provide over 75% of the annual total precipitation at the Air Station.

Over the ocean around Hawaii average windspeeds are highest during the summer tradewind period. These winds are from the northeast quadrant 90% of the time. It is during this winter season that light variable winds are most frequent.

On the average, a tropical storm will pass sufficiently close to Hawaii every year or two to affect the weather in some part of the islands. Hurricanes and tropical storms are most likely to occur during the last half of the year from July through December.

KANEOHE BAY, HAWAII







## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1865													
1866													
1867													
1868													
1869													
1870													
1871													
1872													
1873													
1874													
1875													
1876													
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1920													
1921													
1922													
1923													
1924													
1925													

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

...M... indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. ON SUMMARY		STATION NAME		LONGITUDE		STATION ELEV. (FT)		CALL SIGN		WIND NUMBER	
22519		Kaneohe Bay, Hawaii		21°27'N 157°47'W		18		PHNG		91176	
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>											
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.		MCAS	1952	1962	21°27'N	157°47'W	9.8				
2.	Meteorology office, hangar 105	"	1962	1967	"	"	"				
3.	Weather office, hangar 105	"	1967		"	"	"				
1a.	Meteorology office, hangar 105	"	1962	1967	"	"	"				
2a.	Weather office, hangar 105	"	1967		"	"	11.5				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1956	Atop control tower	UMQ-5	RD-108	1. Barograph (Aero 1932 USN) 2. Auto met station (GMQ-29) 3. Ceiling light (ML 121) 4. Theodolite (ML 247) 5. APT Recorder (Alden 9225N) 6. Fax Recorder (Alden 18")
2.	1956	20' above hangar roof	"	"	
3.	1956	12' atop control tower	"	"	
4.	1961	Adjacent to & 366 yards from center line of runway			
5.	1977	Adjacent to & 366 yards from center line of runway	GMQ-29A	RO-447A	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Iceland, the land of ice and fire, with its numerous glaciers and occasionally active volcanoes lies at the northern edge of the Atlantic Ocean between Norway and Greenland. Although its northern tip extends slightly beyond the Arctic Circle, Iceland's climate is continually moderated by the relatively warm waters from the Gulf Stream.

Keflavik is located at the western tip of the Reykjanes Peninsula which extends approximately 25 miles into the Atlantic Ocean from Reykjavik, Iceland's capital. The surrounding terrain is relatively flat. In general, Iceland experiences only the seasons of summer and winter. There are rapid transitions between these two seasons, approximately, during the months of April and October.

One of the notable characteristics of Keflavik's weather is the extremely rapid changes of the winter weather caused by the rapid movement of pressure systems through the local area.

Prolonged snowfalls rarely occur at Keflavik, since the northeasterly winds usually accompanying wintertime storm systems have a downslope motion from the interior of Iceland and evaporate the low level cloudiness and precipitation. However, a 3 to 7 inch snowfall in the period of a few hours is not uncommon but the snow is usually melted by rainfall within a few days.

Two peculiar winter phenomena occur at Keflavik, Iceland. One is intense, rapid moving snow showers which transit the area in frequencies ranging from several per hour to several per day. The second phenomena is the freezing of roads and runways with temperatures as high as 38 degrees F. and winds as high as 30 to 40 knots. This is believed to result from evaporation cooling aided by low humidity which occurs when winds are from a northerly direction.

Major storm tracks during the summer months are located well to the south of Iceland. Summers are characterized by a decrease in wind speeds and milder temperatures. Although temperatures are still cool an increased occurrence of fog is attributed to a light, warm, southerly flow of maritime tropical air over relatively cool ocean waters. Many potentially warm summer days are spoiled by the invasion of a sea breeze which restricts the temperature to the high 50's or, at most, low 60's.

In spite of the northern locale, the average monthly temperatures are all greater than 32 degrees F., and below zero temperatures have never been observed by U.S. NWSED Keflavik. Consequently, a large part of the maritime precipitation is received in the form of rain, frequently accompanied by 40 to 60 knot winds from the southerly quadrants. Diurnal temperature changes are minimized by the maritime climate and by the "Arctic Behavior" of the sun (i.e. long winter nights and 20-hour mid-summer days).

KEFLAVIK, ICELAND



STN LTRS: BIKF  
WBAN # : 16201  
WMO # : 04018

STATION	TEMPERATURE										PRECIPITATION										INCHES		SNOWFALL		RELATIVE		WIND P.E.S.									
	MEAN					EXTREMES					N					O					T					H		M		LST						
	DAILY	MAX	MIN	MAX	MIN	DAILY	MAX	MIN	MAX	MIN	DAILY	MAX	MIN	DAILY	MAX	MIN	DAILY	MAX	MIN	DAILY	MAX	MIN	DAILY	MAX	MIN	DAILY		MAX	MIN	DAILY	MAX	MIN				
1	36	28	33	49	1	4	4.3	9.2	7	1.4	14	67	12	82	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	
2	37	29	34	48	1	4	4.5	9.9	4	2.7	13	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
3	39	31	35	51	4	4.7	6.0	10.6	1.6	1.3	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
4	42	34	38	56	6	3.7	3.0	8.2	4	1.6	1	6	2	85	74	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
5	48	39	44	66	23	3.0	3.0	6.2	3	1.6	1	6	2	85	74	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
6	52	44	48	64	33	3.0	3.3	6.2	3	1.6	1	6	2	85	74	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
7	58	51	54	70	38	3.6	3.6	5.2	7	1.1	1	6	2	85	74	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
8	55	47	51	67	35	3.8	3.8	7.6	4	1.4	1	6	2	85	74	17	50	25	82	78	16	50	25	82	78	16	50	25	82	78	16	50	25	82	78	
9	50	43	47	64	27	4.5	10.1	9.9	22	2	2	12	5	84	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	
10	45	38	42	57	18	5.5	9.0	1.8	14	2	2	12	5	84	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	13	51	12	82	81	
11	39	32	36	52	15	4.8	12.3	1.3	19	3	19	51	9	82	82	15	48	12	82	82	15	48	12	82	82	15	48	12	82	82	15	48	12	82	82	
12	36	29	33	49	7	5.1	9.6	1.7	23	4	34	78	67	35	84	29	36	29	33	49	7	5.1	9.6	1.7	23	4	34	78	67	35	84	29	36	29	33	49
13	41	70	1	49	1	4.9	12.4	4	20	29	29	36	29	33</																						

MARKS: \*DATA NOT AVAILABLE. # LESS THAN 0.050V/0.5 OR 0.05 INCHS. OR 0.5 PERCENT IS APPLICABLE. THE VALUE LISTED UNDER "WAVES" AT FET 99-95 INDICATES IT IS EXCEEDED ONLY ONCE IN THE YEAR. "EQU" MEANS EQUIVALENT YEARS OR RECORD ("E" FOR "E" RECORD OR "E" RECORD). "COMPUTATIONS FROM THE OVERALL RECORD OR "E" RECORD.

[illegible]







STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
16201		Keflavik, Iceland		63° 58' N		22° 35' W		169		BIKF		04018	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
*1.	Observation tower	Navy	1961	1964	63° 58' N	22° 35' W	164	Tunnelot	24				
2.	Forecast office, second deck Operations building	"	1964	1976	"	"	176	"	24				
1a.	Building T 50 Radiosonde site	"	1967		"	"	129	Aneroid	2				
2a.	Observation tower, third deck Operations building	"	1976		"	"	193	"	24				
SURFACE WIND EQUIPMENT INFORMATION										REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE			
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	MT ABOVE GROUND								
*1.		3400' northwest of the center of the runway complex and 1 1/2 miles northwest of the observation tower	AN/UMQ-5	RD-108	13'								
2.	1968	1450' S of center line of runway 12-30 and 750' E of center line of runway 03-21	AN/UMQ-5C	RD-108B	25'								
* Station operated by U.S. Air Force prior to October 1961. 1. Barograph (marine) 2. Ceiling light (ML-121) 3. Cloud height set (AN/GMQ-13C) 4. Theodolite (ML-247) 5. Transmissometer (AN/GMQ-10B) 6. Radiosonde (AN/GMD-1b) 7. Radar (AN/FPS-81) 8. Weather vision (AN/GMQ-19V) 9. Semi-auto met station (GMQ 14B) 10. RVR (GMQ 10b) 11. Surface Condition Analyzer (SCAN)													

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Key West is located on Boca Chica Key, approximately 5 miles east-northeast of the city of Key West. The Florida Keys are a chain of islands swinging in a southwesterly arc from the southeast coast of the Florida Peninsula. The closest point on the Florida mainland is about 55 miles to the north-east, while Cuba at its closest point is 98 miles south. Boca Chica Key is approximately 3 miles long and 2 1/2 miles wide. The official height of runways is 6 feet above mean sea level. Vegetation is confined to dense mangrove and scattered clusters of small trees with the exception of the landscaped areas of the Naval Air Station.

Key West has a notably mild, tropical-maritime climate. The average temperature during the winter months is only 16 degrees lower than in the summer. There is no known record of frost, ice, or snow in Key West. Prevailing easterly tradewinds and sea breezes suppress the usual summertime heating. Diurnal variations throughout the year average only about 10 degrees.

Northeasterly to easterly winds dominate the autumn and winter months due to polar outbreaks reaching the Gulf of Mexico, while easterly to southeasterly winds prevail during the spring

and summer months due to the influence of the subtropical ridge and the Bermuda High. Wind speeds throughout the year are mostly between 7 and 16 knots with the yearly mean speed of 10 knots.

There are two primary seasons at Key West. The dry season occurring from December through April receives abundant sunshine and slightly less than 22% of the annual rainfall. April is the driest month with less than 1 inch. The rainy season for this area is from June through October. Numerous showers and thunderstorms account for almost two-thirds the average annual rainfall of 38 inches during this period. Early morning is the favored time for the showers. Easterly waves during this season are common and occasionally bring abundant rainfall. The hurricane season is from June through November. June and July are the months when the Key West area is most likely to be affected by tropical disturbances.

Flying weather is exceptionally good with marginal flying weather occurring less than 1% of the time. While humidity remains relatively high during the entire year, fog is quite rare, occurring only once or twice a year.

KEY WEST, FLORIDA







# MEAN TEMPERATURE °F

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1945	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1946	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1947	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1948	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1949	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1950	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1951	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1952	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1953	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1954	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1955	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1956	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1957	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1958	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1959	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1960	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1961	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1962	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1963	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1964	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1965	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1966	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1967	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1968	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1969	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1970	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1971	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1972	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1973	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1974	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1975	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1976	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1977	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1978	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1979	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
1980	71.0	70.5	71.5	72.5	73.5	74.5	75.5	76.5	77.5	78.5	79.5	80.5	74.5
MEAN	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0

# HEATING DEGREE DAYS

Season	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
44-45	18	12	2	0	0	0	0	0	0	0	0	0	32
45-46	18	12	2	0	0	0	0	0	0	0	0	0	32
46-47	18	12	2	0	0	0	0	0	0	0	0	0	32
47-48	18	12	2	0	0	0	0	0	0	0	0	0	32
48-49	18	12	2	0	0	0	0	0	0	0	0	0	32
49-50	18	12	2	0	0	0	0	0	0	0	0	0	32
50-51	18	12	2	0	0	0	0	0	0	0	0	0	32
51-52	18	12	2	0	0	0	0	0	0	0	0	0	32
52-53	18	12	2	0	0	0	0	0	0	0	0	0	32
53-54	18	12	2	0	0	0	0	0	0	0	0	0	32
54-55	18	12	2	0	0	0	0	0	0	0	0	0	32
55-56	18	12	2	0	0	0	0	0	0	0	0	0	32
56-57	18	12	2	0	0	0	0	0	0	0	0	0	32
57-58	18	12	2	0	0	0	0	0	0	0	0	0	32
58-59	18	12	2	0	0	0	0	0	0	0	0	0	32
59-60	18	12	2	0	0	0	0	0	0	0	0	0	32
60-61	18	12	2	0	0	0	0	0	0	0	0	0	32
61-62	18	12	2	0	0	0	0	0	0	0	0	0	32
62-63	18	12	2	0	0	0	0	0	0	0	0	0	32
63-64	18	12	2	0	0	0	0	0	0	0	0	0	32
64-65	18	12	2	0	0	0	0	0	0	0	0	0	32
65-66	18	12	2	0	0	0	0	0	0	0	0	0	32
66-67	18	12	2	0	0	0	0	0	0	0	0	0	32
67-68	18	12	2	0	0	0	0	0	0	0	0	0	32
68-69	18	12	2	0	0	0	0	0	0	0	0	0	32
69-70	18	12	2	0	0	0	0	0	0	0	0	0	32
70-71	18	12	2	0	0	0	0	0	0	0	0	0	32
71-72	18	12	2	0	0	0	0	0	0	0	0	0	32
72-73	18	12	2	0	0	0	0	0	0	0	0	0	32
73-74	18	12	2	0	0	0	0	0	0	0	0	0	32
74-75	18	12	2	0	0	0	0	0	0	0	0	0	32
75-76	18	12	2	0	0	0	0	0	0	0	0	0	32
76-77	18	12	2	0	0	0	0	0	0	0	0	0	32
77-78	18	12	2	0	0	0	0	0	0	0	0	0	32
MEAN	18	12	2	0	0	0	0	0	0	0	0	0	32

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.  
 "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.  
 Partial monthly values were not included in means.

# TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	M	1.05	1.08	1.08	M	M	3.37	1.48	3.50	3.31	M	4.70	M
1945	M	1.39	1.05	0.98	M	M	M	M	4.25	3.57	M	4.70	M
1946	M	2.43	1.05	3.06	M	M	M	M	M	M	M	M	M
1947	M	1.05	1.05	1.05	M	M	M	M	M	M	M	M	M
1948	M	1.05	1.05	1.05	M	M	M	M	M	M	M	M	M
1949	M	1.05	1.05	1.05	M	M	M	M	M	M	M	M	M
1950	M	M	M	M	M	M	M	M	M	M	M	M	M
1951	M	M	M	M	M	M	M	M	M	M	M	M	M
1952	M	M	M	M	M	M	M	M	M	M	M	M	M
1953	M	M	M	M	M	M	M	M	M	M	M	M	M
1954	M	3.81	2.72	2.02	3.62	5.07	1.05	4.33	10.69	7.31	4.48	4.50	4.48
1955	M	1.05	1.05	1.05	1.05	M	3.37	1.48	3.50	3.31	M	4.70	M
1956	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1957	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1958	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1959	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1960	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1961	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1962	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1963	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1964	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1965	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1966	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1967	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1968	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1969	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1970	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1971	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1972	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1973	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1974	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1975	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1976	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1977	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1978	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1979	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1980	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1981	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1982	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1983	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1984	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1985	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1986	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1987	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1988	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1989	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1990	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1991	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1992	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1993	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1994	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1995	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1996	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1997	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1998	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
1999	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2000	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2001	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2002	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2003	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2004	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2005	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2006	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2007	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2008	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2009	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2010	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2011	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2012	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2013	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2014	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2015	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2016	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2017	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2018	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2019	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2020	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2021	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2022	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2023	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2024	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2025	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2026	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2027	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2028	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2029	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2030	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2031	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2032	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2033	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2034	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2035	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2036	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2037	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2038	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2039	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2040	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2041	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2042	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2043	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2044	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2045	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2046	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2047	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2048	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2049	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2050	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2051	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2052	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2053	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2054	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2055	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2056	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2057	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2058	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2059	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2060	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2061	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2062	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2063	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2064	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2065	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2066	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2067	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2068	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2069	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2070	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2071	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2072	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2073	M	1.05	1.05	1.05	1.05	M	M	M	M	M	M	M	M
2074	M	1.05	1.05	1.05	1.05	M	M	M	M	M			



STATION NO. OR SUMMARY:		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
12850		Key West, Florida		24°35'N		81°41'W		6		KNQX			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather Service Office, second deck of building 244	Navy	1953	1960	24°35'N	81°41'W	22	Mercurial	24				
2.	Building 244, room 200	"	1960	1969	"	"	22	"	24				
3.	" " " 210	"	1969	1971	"	"	23	"	24				
4.	" " " 115	"	1971	1974	"	"	11	"	24				
1a.	Building 244, room 200	"	1964	1966	"	"	22	Aneroid	24				
2a.	" " " Replacement	"	1966	1971	"	"	25	"	24				
3a.	" " " 115	"	1971		"	"	13	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	Mounted on tower roof	3 cup	nax-1-48	86'	1. Barograph (ML-3)
2.	Unknown	Replaced 3 cup anemometer	AN/UMQ-5	RD-108	86'	2. Auto met. station (OU-89/GMQ-29)
3.	1964	1100 feet from tacan	"	RD-108C	MSL	3. Ceiling light (ML-121)
4.	1964	Approximately 1625 feet southeast of building 244. Spare transmitter atop building 244.	"	"	22' 23'	
5.	1974	Relocated to 1400 feet northeast of runway intersection	AN/UMQ-5	RO-447	16'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Kingsville, Texas is located 28 miles southwest of Corpus Christi. The flat area surrounding Kingsville is mostly under cultivation, however, some of it is devoted to livestock raising. The nearest body of water, Baffin Bay, is 5 miles southeast of the city and extends approximately 23 miles southeastward to the Laguna Madre along the Gulf of Mexico. Due to the flat, dry character of the terrain, South Texas weather is not affected by orographic influences.

The climate is characteristic of subtropical regions. There is no sharply established delineation of the four seasons. Summer and winter predominate, with shortened transitional periods. The average annual precipitation is just over 23 inches and is spread over the year with one significant wet month (September) and one significant dry month (March). It is not unusual for South Texas to experience periods of long draught in which desert climatic conditions prevail. Above normal tropical cyclone activity in the Gulf of Mexico can produce copious amounts of rain during late summer and autumn. Monthly totals can be misleading as well, since it is possible for a single thunderstorm to account for the entire month's rainfall.

The weather phenomena causing the greatest and most persistent interference with local flying safety are fog and low stratus clouds. Because of the proximity of the Gulf of Mexico and the prevailing low level wind flow from this moisture source, the formation

and dissipation of fog or stratus are major problems. Of the two, stratus occurs more frequently than fog and occurs during all seasons.

While thunderstorms occur during all months of the year, they are much more frequent from April through September. During these months the thunderstorms are mostly of the air mass type. In general, maximum thunderstorm activity occurs during the afternoon, but in all sections of South Texas there is a high frequency of nocturnal thunderstorms drifting inland from the Gulf of Mexico.

Blowing sand or dust occasionally reduces the visibility during the "windy" months of February, March, and April. Some of the sand or dust is carried in aloft from West Texas and visibility is very poor aloft as well as at the surface. This phenomenon occurs only two or three times during the months mentioned.

Funnel clouds and waterspouts are common with intense thunderstorm activity also. Dust devils are numerous during the intensely hot days of summer. Some of them are severe enough to unroof lightly constructed buildings.

The largest and most destructive storms which affect South Texas are tropical cyclones. These storms are most likely to affect the area in August and September with the average frequency for the entire Texas coast being 1 per year.

**KINGSVILLE, TEXAS**



STN LTRS: KNQI  
WHAN # 12928  
WMD # 1

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
FLYING MEA & MRS LST	00	00	00	00	00	00	00	00	00	00	00	00	00	00
CEILING	41	16	18	23	8	1	0	0	1	3	9	14	10	27
LESS 5000	49	19	20	22	10	2	0	0	2	6	14	20	12	27
FT ANG/OR	06	23	24	26	13	3	1	2	4	7	16	24	15	27
VISIBILITY	09	19	19	15	6	3	1	2	5	7	16	22	12	27
LESS 5 MI	12	12	6	4	3	1	1	1	3	3	6	12	6	28
	40	9	4	4	3	1	1	1	2	2	6	9	4	28
	40	13	5	6	3	1	0	1	1	2	6	10	5	28
	31	12	13	16	2	1	0	1	1	2	7	11	7	28
	31	12	14	14	6	2	0	1	2	4	10	15	9	29
ALL HRS	21	15	14	14	6	2	0	1	2	4	10	15	9	29
CEILING	09	4	3	4	1	0	0	0	0	0	2	4	2	27
LESS 500	09	8	7	5	1	0	0	0	0	1	5	7	4	27
FT ANG/OR	06	8	8	2	1	0	0	0	0	2	6	9	4	27
VISIBILITY	09	5	4	0	1	0	0	0	0	1	4	5	2	27
LESS 1 MI	12	1	0	1	1	0	0	0	0	0	0	1	1	28
	15	1	1	1	1	0	0	0	0	0	1	1	1	28
	22	1	1	2	1	0	0	0	0	0	1	2	1	28
	25	1	2	2	1	0	0	0	0	0	1	2	1	27
ALL HRS	6	4	3	2	1	0	0	0	0	1	2	4	2	27
CEILING	09	3	3	3	0	0	0	0	0	0	2	3	3	27
LESS 200	09	5	6	4	2	0	0	0	0	1	5	7	3	27
FT ANG/OR	06	3	1	1	0	0	0	0	0	2	4	4	1	27
VISIBILITY	09	3	1	1	1	0	0	0	0	0	2	4	1	27
LESS 1/2 MI	12	1	0	0	1	0	0	0	0	0	0	0	0	28
	15	1	1	1	1	0	0	0	0	0	0	0	0	27
	18	1	1	1	1	0	0	0	0	0	0	0	0	28
	21	0	1	1	1	0	0	0	0	0	0	0	0	27
ALL HRS	4	3	2	2	1	0	0	0	0	1	2	4	2	27
CEILING	09	3	3	3	0	0	0	0	0	0	2	3	3	27
LESS 200	09	5	6	4	2	0	0	0	0	1	5	7	3	27
FT ANG/OR	06	3	1	1	0	0	0	0	0	2	4	4	1	27
VISIBILITY	09	3	1	1	1	0	0	0	0	0	2	4	1	27
LESS 1/2 MI	12	1	0	0	1	0	0	0	0	0	0	0	0	28
	15	1	1	1	1	0	0	0	0	0	0	0	0	27
	18	1	1	1	1	0	0	0	0	0	0	0	0	28
	21	0	1	1	1	0	0	0	0	0	0	0	0	27
ALL HRS	4	3	2	2	1	0	0	0	0	1	2	4	2	27



# MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1944	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1945	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1946	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1947	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1948	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1949	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1950	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1951	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1952	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1953	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1954	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1955	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1956	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1957	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1958	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1959	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1960	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1961	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1962	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1963	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1964	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1965	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1966	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1967	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1968	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1969	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1970	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1971	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1972	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1973	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1974	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1975	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1976	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1977	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1978	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1979	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
1980	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1
MEAN	59.6	61.1	68.6	72.3	76.7	81.0	83.1	83.1	80.6	71.9	70.8	57.1	71.1

# HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
44-45	0	0	0	0	0	0	20	27	270	323	149	11	34
45-46	0	0	0	0	0	0	20	27	270	323	149	11	34
46-47	0	0	0	0	0	0	20	27	270	323	149	11	34
47-48	0	0	0	0	0	0	20	27	270	323	149	11	34
48-49	0	0	0	0	0	0	20	27	270	323	149	11	34
49-50	0	0	0	0	0	0	20	27	270	323	149	11	34
50-51	0	0	0	0	0	0	20	27	270	323	149	11	34
51-52	0	0	0	0	0	0	20	27	270	323	149	11	34
52-53	0	0	0	0	0	0	20	27	270	323	149	11	34
53-54	0	0	0	0	0	0	20	27	270	323	149	11	34
54-55	0	0	0	0	0	0	20	27	270	323	149	11	34
55-56	0	0	0	0	0	0	20	27	270	323	149	11	34
56-57	0	0	0	0	0	0	20	27	270	323	149	11	34
57-58	0	0	0	0	0	0	20	27	270	323	149	11	34
58-59	0	0	0	0	0	0	20	27	270	323	149	11	34
59-60	0	0	0	0	0	0	20	27	270	323	149	11	34
60-61	0	0	0	0	0	0	20	27	270	323	149	11	34
61-62	0	0	0	0	0	0	20	27	270	323	149	11	34
62-63	0	0	0	0	0	0	20	27	270	323	149	11	34
63-64	0	0	0	0	0	0	20	27	270	323	149	11	34
64-65	0	0	0	0	0	0	20	27	270	323	149	11	34
65-66	0	0	0	0	0	0	20	27	270	323	149	11	34
66-67	0	0	0	0	0	0	20	27	270	323	149	11	34
67-68	0	0	0	0	0	0	20	27	270	323	149	11	34
68-69	0	0	0	0	0	0	20	27	270	323	149	11	34
69-70	0	0	0	0	0	0	20	27	270	323	149	11	34
70-71	0	0	0	0	0	0	20	27	270	323	149	11	34
71-72	0	0	0	0	0	0	20	27	270	323	149	11	34
72-73	0	0	0	0	0	0	20	27	270	323	149	11	34
73-74	0	0	0	0	0	0	20	27	270	323	149	11	34
74-75	0	0	0	0	0	0	20	27	270	323	149	11	34
75-76	0	0	0	0	0	0	20	27	270	323	149	11	34
76-77	0	0	0	0	0	0	20	27	270	323	149	11	34
77-78	0	0	0	0	0	0	20	27	270	323	149	11	34
MEAN	0	0	0	0	0	0	20	27	270	323	149	11	34

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1944	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1945	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1946	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1947	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1948	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1949	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1950	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1951	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1952	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1953	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1954	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1955	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1956	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1957	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1958	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1959	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1960	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1961	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1962	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1963	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1964	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1965	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1966	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1967	4.17	2.84	2.31	3.37	1.17	1.26	1.26	1.10	1.10	5.32	1	90	11.10
1968	4.17	2.84	2.31	3.37	1.17	1.26	1.26						



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
12928		Kingsville, Texas		27° 30' N		97° 49' W		50		KNQI			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQZ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather office, hangar #760	NS		1954	27° 30' N	97° 49' W	60	Mercurial	24				
2.	"	"		1954	"	"	60	"	24				
1a.	Weather service office, Bldg 1770	"		1968	"	"	55	Aneroid	24				
2a.	"	NAAS	1954	1965	"	"	58	"	24				
2b.	"	NAS	1965		"	"	57	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1954	Discontinued	Selsyn	Double register	1. Barograph (7 day open scale) 2. Semi-auto met. station (GMQ-14) 3. Ceiling light (ML/121) 4. Cloud set (AN/GMQ-13C) 5. Transmissometer (AN/GMQ-10C) 6. Radar Fax Recorder (GMH-6(V)) 7. Closed circuit TV (AN/GMQ 27-V) 8. Sta. press. alt. (Kollsman) 9. Pilot to forecaster transmitter/receiver (AM-413A/6)
2.	1954	Installed transmitter on roof of operations building. Recorder is located in weather service office, building 1770.	AN/UMQ-5B	RD-108/UMQ-5	10. Tpg. bucket rain gauge (GMQ-14) 11. RVR 1D-1348 12. Alt. stg. contr. indic. C-7826/F
3.	1961	Transmitter 500' west of operations building # 1770	UMQ-5C	RD-108B	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Engineering Center at Lakehurst, New Jersey is located in east central New Jersey approximately 12 miles inland from the Atlantic Ocean. East central New Jersey has a generally flat topography with some rolling hills. In the immediate vicinity of the station are numerous swamps, cranberry bogs, small rivers, and lakes. NAEC Lakehurst is close enough to the coast to experience two recurring coastal phenomena, a sea breeze and coastal fog. Both of these occur most frequently during the late spring, summer and early autumn. There is very little seasonal variation in the rainfall. Precipitation is fairly uniform for all seasons ranging from a high monthly average of 3.8 inches during the summer to a low of 3.2 inches per month during the spring.

The winter months (December - March) are characterized by

storms that move along the eastern seaboard. These storms bring high winds and heavy precipitation in the form of snow, ice pellets and/or rain. The "Gulf" or "Hatteras" lows produce the poorest local flying weather, but the station experiences marginal flying weather only 18% of the time annually.

The spring transition is a period of contrasting weather particularly during April, whereas the autumn is a season of comfortable temperatures and generally pleasant weather. The summer months are warm and humid with occasional showers and thunderstorms. Ground fog is a major weather problem in the summer especially during the early morning hours. Marginal visibility is also a problem when low level southwesterly winds advect industrial pollutants from the Philadelphia area. The resulting haze and smoke may linger for several days in the local flying area.

LAKEHURST, NEW JERSEY







# MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	33.7	31.2	34.8	37.2	39.0	40.7	42.3	43.8	45.2	46.5	47.2	47.8	40.8
1945	33.3	31.8	35.4	37.8	39.5	41.2	42.8	44.5	45.8	47.2	48.5	49.2	41.5
1946	33.8	32.5	36.1	38.5	40.2	41.9	43.6	45.3	46.8	48.2	49.5	50.2	42.5
1947	34.2	32.9	36.5	38.9	40.6	42.3	44.0	45.7	47.4	48.7	49.8	50.5	43.0
1948	34.6	33.3	36.9	39.3	41.0	42.7	44.4	46.1	47.8	49.1	50.2	50.9	43.5
1949	35.0	33.7	37.3	39.7	41.4	43.1	44.8	46.5	48.2	49.5	50.6	51.3	44.0
1950	35.4	34.1	37.7	40.1	41.8	43.5	45.2	46.9	48.6	49.9	51.0	51.7	44.5
1951	35.8	34.5	38.1	40.5	42.2	43.9	45.6	47.3	49.0	50.3	51.4	52.1	45.0
1952	36.2	34.9	38.5	40.9	42.6	44.3	46.0	47.7	49.4	50.7	51.8	52.5	45.5
1953	36.6	35.3	38.9	41.3	43.0	44.7	46.4	48.1	49.8	51.1	52.2	52.9	46.0
1954	37.0	35.7	39.3	41.7	43.4	45.1	46.8	48.5	49.8	50.9	52.0	52.7	46.5
1955	37.4	36.1	39.7	42.1	43.8	45.5	47.2	48.9	50.2	51.3	52.4	53.1	47.0
1956	37.8	36.5	40.1	42.5	44.2	45.9	47.6	49.3	50.6	51.7	52.8	53.5	47.5
1957	38.2	36.9	40.5	42.9	44.6	46.3	48.0	49.7	51.0	52.1	53.2	53.9	48.0
1958	38.6	37.3	40.9	43.3	45.0	46.7	48.4	50.1	51.4	52.5	53.6	54.3	48.5
1959	39.0	37.7	41.3	43.7	45.4	47.1	48.8	50.5	51.8	52.9	54.0	54.7	49.0
1960	39.4	38.1	41.7	44.1	45.8	47.5	49.2	50.9	52.2	53.3	54.4	55.1	49.5
1961	39.8	38.5	42.1	44.5	46.2	47.9	49.6	51.3	52.6	53.7	54.8	55.5	50.0
1962	40.2	38.9	42.5	44.9	46.6	48.3	50.0	51.7	53.0	54.1	55.2	55.9	50.5
1963	40.6	39.3	42.9	45.3	47.0	48.7	50.4	52.1	53.4	54.5	55.6	56.3	51.0
1964	41.0	39.7	43.3	45.7	47.4	49.1	50.8	52.5	53.8	54.9	56.0	56.7	51.5
1965	41.4	40.1	43.7	46.1	47.8	49.5	51.2	52.9	54.2	55.3	56.4	57.1	52.0
1966	41.8	40.5	44.1	46.5	48.2	49.9	51.6	53.3	54.6	55.7	56.8	57.5	52.5
1967	42.2	40.9	44.5	46.9	48.6	50.3	52.0	53.7	55.0	56.1	57.2	57.9	53.0
1968	42.6	41.3	44.9	47.3	49.0	50.7	52.4	54.1	55.4	56.5	57.6	58.3	53.5
1969	43.0	41.7	45.3	47.7	49.4	51.1	52.8	54.5	55.8	56.9	58.0	58.7	54.0
1970	43.4	42.1	45.7	48.1	49.8	51.5	53.2	54.9	56.2	57.3	58.4	59.1	54.5
1971	43.8	42.5	46.1	48.5	50.2	51.9	53.6	55.3	56.6	57.7	58.8	59.5	55.0
1972	44.2	42.9	46.5	48.9	50.6	52.3	54.0	55.7	57.0	58.1	59.2	59.9	55.5
1973	44.6	43.3	46.9	49.3	51.0	52.7	54.4	56.1	57.4	58.5	59.6	60.3	56.0
1974	45.0	43.7	47.3	49.7	51.4	53.1	54.8	56.5	57.8	58.9	60.0	60.7	56.5
1975	45.4	44.1	47.7	50.1	51.8	53.5	55.2	56.9	58.2	59.3	60.4	61.1	57.0
1976	45.8	44.5	48.1	50.5	52.2	53.9	55.6	57.3	58.6	59.7	60.8	61.5	57.5
1977	46.2	44.9	48.5	50.9	52.6	54.3	56.0	57.7	59.0	60.1	61.2	61.9	58.0
1978	46.6	45.3	48.9	51.3	53.0	54.7	56.4	58.1	59.4	60.5	61.6	62.3	58.5
1979	47.0	45.7	49.3	51.7	53.4	55.1	56.8	58.5	59.8	60.9	62.0	62.7	59.0
1980	47.4	46.1	49.7	52.1	53.8	55.5	57.2	58.9	60.2	61.3	62.4	63.1	59.5
1981	47.8	46.5	50.1	52.5	54.2	55.9	57.6	59.3	60.6	61.7	62.8	63.5	60.0
1982	48.2	46.9	50.5	52.9	54.6	56.3	58.0	59.7	61.0	62.1	63.2	63.9	60.5
1983	48.6	47.3	50.9	53.3	55.0	56.7	58.4	60.1	61.4	62.5	63.6	64.3	61.0
1984	49.0	47.7	51.3	53.7	55.4	57.1	58.8	60.5	61.8	62.9	64.0	64.7	61.5
1985	49.4	48.1	51.7	54.1	55.8	57.5	59.2	60.9	62.2	63.3	64.4	65.1	62.0
1986	49.8	48.5	52.1	54.5	56.2	57.9	59.6	61.3	62.6	63.7	64.8	65.5	62.5
1987	50.2	48.9	52.5	54.9	56.6	58.3	60.0	61.7	63.0	64.1	65.2	65.9	63.0
1988	50.6	49.3	52.9	55.3	57.0	58.7	60.4	62.1	63.4	64.5	65.6	66.3	63.5
1989	51.0	49.7	53.3	55.7	57.4	59.1	60.8	62.5	63.8	64.9	66.0	66.7	64.0
1990	51.4	50.1	53.7	56.1	57.8	59.5	61.2	62.9	64.2	65.3	66.4	67.1	64.5
1991	51.8	50.5	54.1	56.5	58.2	59.9	61.6	63.3	64.6	65.7	66.8	67.5	65.0
1992	52.2	50.9	54.5	56.9	58.6	60.3	62.0	63.7	65.0	66.1	67.2	67.9	65.5
1993	52.6	51.3	54.9	57.3	59.0	60.7	62.4	64.1	65.4	66.5	67.6	68.3	66.0
1994	53.0	51.7	55.3	57.7	59.4	61.1	62.8	64.5	65.8	66.9	68.0	68.7	66.5
1995	53.4	52.1	55.7	58.1	59.8	61.5	63.2	64.9	66.2	67.3	68.4	69.1	67.0
1996	53.8	52.5	56.1	58.5	60.2	61.9	63.6	65.3	66.6	67.7	68.8	69.5	67.5
1997	54.2	52.9	56.5	58.9	60.6	62.3	64.0	65.7	67.0	68.1	69.2	69.9	68.0
1998	54.6	53.3	56.9	59.3	61.0	62.7	64.4	66.1	67.4	68.5	69.6	70.3	68.5
1999	55.0	53.7	57.3	59.7	61.4	63.1	64.8	66.5	67.8	68.9	70.0	70.7	69.0
2000	55.4	54.1	57.7	60.1	61.8	63.5	65.2	66.9	68.2	69.3	70.4	71.1	69.5
2001	55.8	54.5	58.1	60.5	62.2	63.9	65.6	67.3	68.6	69.7	70.8	71.5	70.0
2002	56.2	54.9	58.5	60.9	62.6	64.3	66.0	67.7	69.0	70.1	71.2	71.9	70.5
2003	56.6	55.3	58.9	61.3	63.0	64.7	66.4	68.1	69.4	70.5	71.6	72.3	71.0
2004	57.0	55.7	59.3	61.7	63.4	65.1	66.8	68.5	69.8	70.9	72.0	72.7	71.5
2005	57.4	56.1	59.7	62.1	63.8	65.5	67.2	68.9	70.2	71.3	72.4	73.1	72.0
2006	57.8	56.5	60.1	62.5	64.2	65.9	67.6	69.3	70.6	71.7	72.8	73.5	72.5
2007	58.2	56.9	60.5	62.9	64.6	66.3	68.0	69.7	71.0	72.1	73.2	73.9	73.0
2008	58.6	57.3	60.9	63.3	65.0	66.7	68.4	70.1	71.4	72.5	73.6	74.3	73.5
2009	59.0	57.7	61.3	63.7	65.4	67.1	68.8	70.5	71.8	72.9	74.0	74.7	74.0
2010	59.4	58.1	61.7	64.1	65.8	67.5	69.2	70.9	72.2	73.3	74.4	75.1	74.5
2011	59.8	58.5	62.1	64.5	66.2	67.9	69.6	71.3	72.6	73.7	74.8	75.5	75.0
2012	60.2	58.9	62.5	64.9	66.6	68.3	70.0	71.7	73.0	74.1	75.2	75.9	75.5
2013	60.6	59.3	62.9	65.3	67.0	68.7	70.4	72.1	73.4	74.5	75.6	76.3	76.0
2014	61.0	59.7	63.3	65.7	67.4	69.1	70.8	72.5	73.8	74.9	76.0	76.7	76.5
2015	61.4	60.1	63.7	66.1	67.8	69.5	71.2	72.9	74.2	75.3	76.4	77.1	77.0
2016	61.8	60.5	64.1	66.5	68.2	69.9	71.6	73.3	74.6	75.7	76.8	77.5	77.5
2017	62.2	60.9	64.5	66.9	68.6	70.3	72.0	73.7	75.0	76.1	77.2	77.9	78.0
2018	62.6	61.3	64.9	67.3	69.0	70.7	72.4	74.1	75.4	76.5	77.6	78.3	78.5
2019	63.0	61.7	65.3	67.7	69.4	71.1	72.8	74.5	75.8	76.9	78.0	78.7	79.0
2020	63.4	62.1	65.7	68.1	69.8	71.5	73.2	74.9	76.2	77.3	78.4	79.1	79.5
2021	63.8	62.5	66.1	68.5	70.2	71.9	73.6	75.3	76.6	77.7	78.8	79.5	80.0
2022	64.2	62.9	66.5	68.9	70.6	72.3	74.0	75.7	77.0	78.1	79.2	79.9	80.5
2023	64.6	63.3	66.9	69.3	71.0	72.7	74.4	76.1	77.4	78.5	79.6	80.3	81.0
2024	65.0	63.7	67.3	69.7	71.4	73.1	74.8	76.5	77.8	78.9	80.0	80.7	81.5
2025	65.4	64.1	67.7	70.1	71.8	73.5	75.2	76.9	78.2	79.3	80.4	81.1	82.0
2026	65.8	64.5	68.1	70.5	72.2	73.9	75.6	77.3	78.6	79.7	80.8	81.5	82.5
2027	66.2	64.9	68.5	70.9	72.6	74.3	76.0	77.7	79.0	80.1	81.2	81.9	83.0
2028	66.6	65.3	68.9	71.3	73.0	74.7	76.4	78.1	79.4	80.5	81.6	82.3	83.5
2029	67.0	65.7	69.3	71.7	73.4	75.1	76.8	78.5	79.8	80.9	82.0	82.7	84.0
2030	67.4	66.1	69.7	72.1	73.8	75.5	77.2	78.9	80.2	81.3	82.4	83.1	84.5
2031	67.8	66.5	70.1	72.5	74.2	75.9	77.6	79.3	80.6	81.7	82.8	83.5	85.0
2032	68.2	66.9	70.5	72.9	74.6	76.3	78.0	79.7	81.0	82.1	83.2	83.9	85.5
2033	68.6	67.3	70.9	73.3	75.0	76.7	78.4	80.1	81.4	82.5	83.6	84.3	86.0
2034	69.0	67.7	71.3	73.7	75.4	77.1	78.8	80.5	81.8	82.9	84.0	84.7	86.5
2035	69.4	68.1	71.7	74.1	75.8	77.5	79.2	80.9	82.2	83.3	84.4	85.1	87.0
2036	69.8	68.5	72.1	74.5	76.2	77.9	79.6						



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
14780		Lakehurst, New Jersey		40°02'N		74°21'W		93		KNEL		72409	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	South side of room 220-General Service Bldg (Weather service off.)	Navy		1959	40°02'N	74°21'W	120.5	Mercurial	24				
2.	North side of room 202-HTA hangar (Weather service office)	"	1959	1966	"	"	110	"	24				
3.	Weather office, 2nd deck	"	1966	1976	"	"	110	"	24				
1a.	Weather Office	"	1966	1971	"	"	110	Aneroid	24				
2a.	Building 307, room 201	"	1971	1976	"	"	110	"	24				
3a.	" " " "	"	1976		"	"	110	"	18				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		On 50' mast atop General Service Building No. 150	Selsyn	Triple	79'	1. Barograph
1a.		Atop General Service Building No 150	aero-vane		79'	2. Semi-auto met. station
2.	1951	Atop General Service Building	Selsyn	Triple	63'7"	3. Cloud height set (AN/GMQ-13B)
2a.	1951	" "	aero-vane		63'	4. Ceiling light (ML-121)
3a.	1959	Transmitter "B" 900' southeast, Building 307	AN/UMQ-5	RD-108B	28'	5. Fax Recorder (GMH-6)
						6. Cloud height recorder (RD-121)
						7. Cloud height indicator (LP 327B)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Lemoore is located in the center of the Southern San Joaquin Valley, about 30 miles southwest of Fresno, California. The terrain around Lemoore is generally flat and level, consisting mainly of irrigated crop fields and fruit orchards. The foothills of the Sierra Nevada mountains begin their rise rather abruptly 40 miles east of Lemoore. Twenty miles to the west, the foothills of the Diablo Range of the Coastal mountains rise abruptly.

The climate at Lemoore is dry, with mild winters and hot summers. Nearly all the annual precipitation falls from November to March.

Clear skies prevail nearly 8 months of each year. From mid-November to mid-February the flying weather at Lemoore is occasionally marginal. Fog accounts for nearly all the instrument flight conditions at Lemoore. Aside from the winter fog the only other obstruction reducing normally good visibility is smoke produced by burning in the fields adjacent to the station.

The effects of frontal systems differ widely depending upon speed of movement and intensity with the emphasis on speed of movement.

The prevailing winds at Lemoore are directly related to the orientation of the San Joaquin Valley, north-northwest to south-southeast. Of particular interest are the strong gradient winds that produce an eddy effect in the southern portion of the San Joaquin Valley; however, gradient winds at Lemoore will be northwesterly at 25-35 knots.

Destructive storms and other severe weather phenomena are almost non-existent in the San Joaquin Valley.

The climatological feature for which Lemoore is most noted are the 100 degrees plus temperatures recorded almost daily from early June to early September of each year. These temperature extremes are tolerable due to the low humidity and constant light winds that produce almost "tropical" evenings.

LEMOORE, CALIFORNIA







MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1961	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1962	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1963	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1964	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1965	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1966	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1967	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1968	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1969	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1970	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1971	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1972	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1973	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1974	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1975	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1976	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1977	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1978	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1979	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
1980	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0
MEAN	48.6	48.1	51.4	54.2	57.0	60.0	62.4	61.7	57.0	52.4	51.1	48.0	54.0

TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1961	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1962	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1963	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1964	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1965	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1966	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1967	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1968	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1969	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1970	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1971	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1972	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1973	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1974	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1975	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1976	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1977	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1978	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1979	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
1980	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
MEAN	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01

HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
60-61	0	0	0	0	0	0	0	0	0	0	0	0	0
61-62	0	0	0	0	0	0	0	0	0	0	0	0	0
62-63	0	0	0	0	0	0	0	0	0	0	0	0	0
63-64	0	0	0	0	0	0	0	0	0	0	0	0	0
64-65	0	0	0	0	0	0	0	0	0	0	0	0	0
65-66	0	0	0	0	0	0	0	0	0	0	0	0	0
66-67	0	0	0	0	0	0	0	0	0	0	0	0	0
67-68	0	0	0	0	0	0	0	0	0	0	0	0	0
68-69	0	0	0	0	0	0	0	0	0	0	0	0	0
69-70	0	0	0	0	0	0	0	0	0	0	0	0	0
70-71	0	0	0	0	0	0	0	0	0	0	0	0	0
71-72	0	0	0	0	0	0	0	0	0	0	0	0	0
72-73	0	0	0	0	0	0	0	0	0	0	0	0	0
73-74	0	0	0	0	0	0	0	0	0	0	0	0	0
74-75	0	0	0	0	0	0	0	0	0	0	0	0	0
75-76	0	0	0	0	0	0	0	0	0	0	0	0	0
76-77	0	0	0	0	0	0	0	0	0	0	0	0	0
77-78	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

LEMOORE, CALIFORNIA



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
23110		Lemoore, California		36°20'N		119°57'W		235		KNLC		74702	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	Navy	1961	1966	36°20'N	119°57'W	238	Mercurial	24				
2.	Replacement installed	"	1966	1976	"	"	238	"	24				
1a.	Weather service office	"	1961		"	"	240	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1961	500' west of midpoint, runway 32L/14R	AN/UMQ-5	RD-108	1. Barograph (marine) 2. Auto met. station (AN/GMQ-29) 3. Cloud height set (AN/GMQ-13C) 4. Theodolite (ML 474) 5. Transmissometer (AN/GMQ-10C) 6. Weather vision (AN/GMQ-19V) 7. Wind measuring set (AN/PMQ-3C) 8. (3) ASCI II Character Generators (CT 64) 9. Telephone answer set (AC 2)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

U.S. Naval Station at Mayport, Florida is located on the northeast coast of Florida on the Saint John's River. The surrounding terrain is mostly level and averages about 15 to 20 feet above mean sea level. It is generally a swampy area with a heavily wooded section of live oak to the south of the station. To the west and north, the station is bounded by the Saint John's River and to the east by the Atlantic Ocean. With easterly winds prevailing much of the time a maritime influence results that modifies the heat of summer and the cold of winter. Cold fronts usually become stationary before reaching Mayport. Those cold outbreaks that do make it south of the station are usually followed by gusty northwest to northeast winds lasting one to three days.

The annual mean temperature for Mayport is near 70 degrees F. June, July, and August are the warmest months with the normal average maximum temperature reaching 85 degrees F. to 88 degrees F. and the monthly extremes reaching up to 99 degrees F. December, January, and February are the coldest months with mean temperatures near 55 degrees F. and extreme lows ranging from 15 degrees F. in December to 23 degrees F. in February.

The average relative humidity varies from 85% in the morning to 70% in the afternoon. Precipitation all in the form of rain, totals about 43 inches per year. The greatest monthly rainfall

occurs during the summer months. Local thundershower activity produces most of the summer rainfall. November and December are the driest months with about 2 inches of rainfall per month.

The prevailing winds are generally northeasterly in the fall and winter months. Southwesterly winds prevail during the spring and summer months except from May through September during the afternoon and early evening hours, a pronounced easterly sea breeze can be expected from 10 to 20 days per month. Destructive winds on the whole are rare in the area and are, in most instances, associated with thunderstorm activity; however, tornadoes and water spouts have been observed in the area during the passage of a severe squall line. The area is rarely affected by the full fury of hurricanes. Tropical storms reaching this latitude generally move parallel to the coastline, keeping well out to sea, or lose much of their force moving over land before reaching this area.

Flying conditions are for the most part good through the year with Visual Flight Rules (VFR) existing in excess of 90% most of the time. Morning fog can be expected on an average of 9 to 13 days per month except 15 to 20 days per month during January, February, and March.

MAYPORT, FLORIDA



STN LTR: KNRB  
WDAN # : 03053  
WHO # :

FLYING MEA & HRS	EST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	01	30	24	16	14	9	11	1	6	15	16	20	21	17	13
LESS 5000	04	29	23	21	14	10	13	5	6	15	16	22	24	19	15
PT ANG/DR	07	36	29	26	19	16	22	10	8	22	23	27	30	22	19
VISIBILITY	10	32	29	25	16	18	22	16	15	26	25	22	26	23	19
LESS 5 MI	13	38	26	23	18	18	24	24	19	27	27	23	26	24	19
	16	30	27	22	16	22	23	20	18	23	20	22	22	22	19
	19	25	26	17	14	18	17	10	13	19	18	21	23	19	15
	22	26	20	13	16	13	11	6	8	16	24	18	20	15	11
ALL HRS	30	30	27	16	16	16	17	13	12	21	22	22	24	20	17
CEILING	01	13	10	5	4	1	1	1	2	1	3	6	10	5	13
LESS 1000	04	14	11	11	9	3	2	0	3	2	5	8	13	6	15
PT ANG/DR	07	17	11	7	9	3	2	0	2	3	7	13	15	9	19
VISIBILITY	10	13	11	6	3	2	1	1	2	3	4	5	11	6	19
LESS 5 MI	13	12	8	6	3	2	1	1	2	3	4	5	9	4	19
	16	11	8	6	3	2	1	1	2	3	4	7	9	5	15
	19	12	9	6	3	2	1	1	2	3	4	7	9	5	15
	22	11	8	5	3	1	1	0	2	3	4	7	9	4	17
ALL HRS	13	13	10	7	4	2	2	1	2	2	4	5	10	6	17
CEILING	01	8	6	3	2	1	0	0	0	1	2	2	8	3	13
LESS 500	04	11	10	6	5	2	2	1	2	2	3	5	9	4	13
PT ANG/DR	07	12	10	7	5	3	2	1	3	3	3	7	9	5	19
VISIBILITY	10	19	16	1	1	0	1	0	0	1	1	3	7	3	19
LESS 2 MI	13	8	4	3	1	0	1	0	1	1	1	3	7	3	19
	16	7	4	2	1	0	1	0	1	1	1	3	7	3	19
	19	8	5	2	1	0	1	0	1	1	1	3	7	3	19
	22	8	4	3	2	1	1	0	0	1	1	3	7	3	19
ALL HRS	9	9	6	4	2	1	1	0	1	1	1	3	7	3	17
CEILING	01	5	4	2	1	0	0	0	0	0	1	1	5	2	13
LESS 500	04	7	6	3	2	1	1	0	1	1	2	3	5	3	13
PT ANG/DR	07	9	7	4	3	2	2	0	1	2	3	5	8	3	19
VISIBILITY	10	6	3	2	1	0	0	0	0	0	0	1	2	2	19
LESS 1 MI	13	4													



# MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1899	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1900	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1901	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1902	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1903	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1904	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1905	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1906	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1907	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1908	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1909	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1910	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1911	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1912	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1913	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1914	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1915	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1916	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1917	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1918	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
1919	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6	54.6
MEAN	54.2	54.6	54.7	54.6	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.9	54.7

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1899	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1900	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1901	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1902	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1903	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1904	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1905	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1906	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1907	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1908	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1909	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1910	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1911	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1912	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1913	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1914	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1915	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1916	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1917	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1918	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
1919	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
MEAN	2.51	2.29	2.31	2.04	2.91	2.97	2.48	2.72	2.63	2.69	2.61	2.10	2.61

# HEATING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1899	204	204	204	204	204	204	204	204	204	204	204	204	204
1900	204	204	204	204	204	204	204	204	204	204	204	204	204
1901	204	204	204	204	204	204	204	204	204	204	204	204	204
1902	204	204	204	204	204	204	204	204	204	204	204	204	204
1903	204	204	204	204	204	204	204	204	204	204	204	204	204
1904	204	204	204	204	204	204	204	204	204	204	204	204	204
1905	204	204	204	204	204	204	204	204	204	204	204	204	204
1906	204	204	204	204	204	204	204	204	204	204	204	204	204
1907	204	204	204	204	204	204	204	204	204	204	204	204	204
1908	204	204	204	204	204	204	204	204	204	204	204	204	204
1909	204	204	204	204	204	204	204	204	204	204	204	204	204
1910	204	204	204	204	204	204	204	204	204	204	204	204	204
1911	204	204	204	204	204	204	204	204	204	204	204	204	204
1912	204	204	204	204	204	204	204	204	204	204	204	204	204
1913	204	204	204	204	204	204	204	204	204	204	204	204	204
1914	204	204	204	204	204	204	204	204	204	204	204	204	204
1915	204	204	204	204	204	204	204	204	204	204	204	204	204
1916	204	204	204	204	204	204	204	204	204	204	204	204	204
1917	204	204	204	204	204	204	204	204	204	204	204	204	204
1918	204	204	204	204	204	204	204	204	204	204	204	204	204
1919	204	204	204	204	204	204	204	204	204	204	204	204	204
MEAN	144	112	279	342	292	179	90	1	0	1363			

# COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1899	10	10	10	10	10	10	10	10	10	10	10	10	10
1900	10	10	10	10	10	10	10	10	10	10	10	10	10
1901	10	10	10	10	10	10	10	10	10	10	10	10	10
1902	10	10	10	10	10	10	10	10	10	10	10	10	10
1903	10	10	10	10	10	10	10	10	10	10	10	10	10
1904	10	10	10	10	10	10	10	10	10	10	10	10	10
1905	10	10	10	10	10	10	10	10	10	10	10	10	10
1906	10	10	10	10	10	10	10	10	10	10	10	10	10
1907	10	10	10	10	10	10	10	10	10	10	10	10	10
1908	10	10	10	10	10	10	10	10	10	10	10	10	10
1909	10	10	10	10	10	10	10	10	10	10	10	10	10
1910	10	10	10	10	10	10	10	10	10	10	10	10	10
1911	10	10	10	10	10	10	10	10	10	10	10	10	10
1912	10	10	10	10	10	10	10	10	10	10	10	10	10
1913	10	10	10	10	10	10	10	10	10	10	10	10	10
1914	10	10	10	10	10	10	10	10	10	10	10	10	10
1915	10	10	10	10	10	10	10	10	10	10	10	10	10
1916	10	10	10	10	10	10	10	10	10	10	10	10	10
1917	10	10	10	10	10	10	10	10	10	10	10	10	10
1918	10	10	10	10	10	10	10	10	10	10	10	10	10
1919	10	10	10	10	10	10	10	10	10	10	10	10	10
MEAN	14	13	31	109	289	499	499	499	499	499	499	499	499

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

MAYPORT, FLORIDA



STATION NO. OR SUMMARY		STATION NAME		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WIND NUMBER	
03853		Mayport, Florida		30°24'N		81°25'W		16		KNRB	
STATION LOCATION AND INSTRUMENTATION HISTORY											
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS. PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.	Weather service office	Navy	1963	1976	30°24'N	81°25'W	20	Mercurial	Var		
1a.	"	"	1958	1966	"	"	21	Aneroid	24		
2a.	"	"	1966		"	"	18	"	19		

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	Unknown	Atop control tower	Selsyn	Triple	1. Barograph (marine)
2.	1956	"	"	"	2. Semi-auto. met station (AN/GMQ-14B)
3.	1958	"	"	"	3. Ceiling light set (ML 121)
4.	1959	Approximately 2200 feet northwest of operations building	AN/UMQ-5	RD-108	4. Cloud height set (AN/GMQ-13C)
5.	1964	Same as above	"	"	5. Transmissometer (AN/GMQ-10C)
6.	1967	Approximately 750' NW of the intersection of ABND runway and runway No. 23	AN/UMQ-5C	RD-108B	6. Radar Facsimile RO-415/GMH-6
					7. Facsimile (Alden)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

McMurdo is located on a tip of a peninsula about 7 miles long that extends southwestward from Ross Island. This peninsula, known as Hut Point Peninsula, is an extension of the lower slopes of Mount Erebus, an active volcano whose summit is about 13,000 feet. Ross Island is located about 40 miles off the Victoria Land Coast of Antarctica. The area to the south through east is the flat ice shelf of the Ross Sea extending several hundred miles, interrupted by any significant land forms, and exposing the station to winds from the east through south. To the west, across McMurdo Sound and through the north to the northeast lies the Ross Sea, covered most of the year by annual sea ice, but becoming largely open water in mid and late summer. Across McMurdo Sound lies the Royal Society Mountains which are a part of the Trans-Antarctic Mountain Range and which extend to 14,000 feet. Prevailing mid and upper tropospheric westerly winds blow across the Royal Society Mountains, thence across Ross Island. This flow is mainly a downslope, katabatic, dry wind and accounts for much of the excellent weather experienced at McMurdo.

McMurdo enjoys a crisp, cool, invigorating and pleasant environment interrupted by brief periods of howling snow-laden cold winds.

Temperatures generally remain well below freezing year round, with August usually the coldest month. Summer occurs for about 2 months, December to early February, with 2 transitional months on either side of a six-month winter. The first sunrise is approximately 19 August and 24 hours of daylight begins on 23 October. The first sunset is approximately 20 February and 24 hours of darkness begins 25 April.

Maximum cloudiness is restricted to the coastal or offshore areas and decreases towards a minimum over the central plateau. Maximum cloudiness occurs in February and March with most clear days in July. The maximum measurable precipitation is coincident with the cloud maximum and occurs in February.

The average wind speeds for each month are not excessive, ranging from 10 to 15 knots, and all prevailing directions are easterly. When storm condition exists, transportation and all aircraft operations are at a standstill. These storms always bring fresh snow and the visibility is reduced to near zero in snow and blowing snow.

**McMURDO, ANTARCTICA**



PREPARED BY: NWSO ASHEVILLE  
JUNE 1978

STATION NAME: MC MURDO, ANTARCTICA  
LOCATION 1 577 51 E166 39

PERIOD: MAR 56-DEC 77  
ELEV: 109

STN LTRS: NZCH  
MBAN #: 87601  
WMO #: 89664

TEMPERATURE DEG F										PRECIPITATION INCHES										SNOWFALL RELATIVE										S DEW PRESS SFC WINDS										MEAN 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## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Annual
1955	17.4	17.9	10.4	-2.3	12.0	12.7	12.7	-25.0	-	-4.0	19.7	27.4
1956	17.4	17.4	-1.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5	-11.5
1957	25.0	21.3	-1.9	-9.3	-1.1	-5.6	-2.7	-22.0	-1.3	-4.0	16.0	21.2
1958	25.0	21.3	-1.9	-9.3	-1.1	-5.6	-2.7	-22.0	-1.3	-4.0	16.0	21.2
1959	21.1	17.6	6.4	-6.7	-12.7	-10.7	-10.6	-21.3	-1.6	-11.9	11.0	27.1
1960	21.1	17.6	6.4	-6.7	-12.7	-10.7	-10.6	-21.3	-1.6	-11.9	11.0	27.1
1961	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1962	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1963	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1964	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1965	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1966	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1967	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1968	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1969	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1970	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1971	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1972	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1973	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1974	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1975	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1976	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1977	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1978	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1979	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1980	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1981	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1982	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1983	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1984	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1985	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1986	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1987	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2	24.4	1.5
1988	25.0	18.7	-1.7	-2.0	-10.3	-18.1	-18.9	-7.6	-2.1	-18.2		

## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1895	7	7	15.89	21	2.20	3.8	7	7	1.5	1.3	2.2	2.2	
1896	7	7	3.8	2.2	2.20	3.8	7	7	1.5	1.3	2.2	2.2	
1897	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1898	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1899	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1900	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1901	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1902	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1903	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1904	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1905	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1906	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1907	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1908	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1909	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1910	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1911	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1912	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1913	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1914	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1915	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1916	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1917	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1918	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1919	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1920	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1921	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1922	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1923	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1924	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1925	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1926	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1927	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1928	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1929	7	7	1.5	4.0	7	7	1.5	1.05	1.5	1.05	1.5	1.5	1.5
1930	7	7	1.5	4.0	7</								

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
33-34													
34-35													
35-36													
36-37	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
37-38	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
38-39	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
39-40	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
40-41	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
41-42	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
42-43	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
43-44	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
44-45	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
45-46	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
46-47	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
47-48	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
48-49	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
49-50	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
50-51	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
51-52	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
52-53	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
53-54	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
54-55	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
55-56	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
56-57	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
57-58	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
58-59	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
59-60	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
60-61	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
61-62	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
62-63	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
63-64	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
64-65	2385	7498	2084	2136	1441	1134	1264	1327	191	2775	2085	2316	N
65-66	2385	7498	2084	2136	1441	1134	1264						

**COOLING DEGREE DAYS**

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

**MCMURDO, ANTARCTICA**



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
87601		McMurdo, Antarctica		77°51'S		166°39'E		109		NZCM		89664	

STATION LOCATION AND INSTRUMENTATION HISTORY											
NUMBER OF BAROQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.	Weather office	Navy	1956	1964	77°51'S	166°39'E	80	"	Mercurial " " "		
2.	Resurveyed	"	1964	1965	"	"	84.33	"			
3.	Meteorology building 51	"	1965	1972	"	"	109.0	"			
4.	Admin/Ops building 165	"	1972		"	"		"			
1a.	GMD space adjacent to weather off.	"	1964	1965	"	"	84	Aneroid	" " "		
2a.	Meteorology building 51	"	1965	1971	"	"	85	"			
3a.	Admin/Ops building 165	"	1971		"	"	109.1	"			

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	Prior to 1957	80'S of aerological office			1. Barograph 2. Theodolite (ML 247) 3. Speedomax (H Leeds/Northrup) 4. Radiosonde (GMD-1B)
2.	1958	20 meters S of aerological office			
3.	1959	Adjacent to aerological office	UMQ-5C		
4.	1960	Replaced UMQ-5C	UMQ-5D	RD-108B	
5.	1972	NW Corner admin/ops bldg. 165	UMQ-5C	RD-108D	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Memphis is located 22 miles NNE of Memphis International Airport in the southwestern corner of Tennessee on a relatively flat area of the Mississippi River basin. The terrain in the immediate vicinity of the station being a low rolling type with an elevation of 295 feet above mean sea level.

Dominating air masses for the local area are the continental polar air mass, and associated polar front, during the winter months and the maritime tropical air mass which is a part of the Bermuda high circulation during the summer months. Pre-frontal squall lines produce severe thunderstorms and tornado activity in the local area during the winter and spring. During the summer months, pre-frontal squall line thunderstorms are replaced by convective type thunderstorms. Occasionally tropical cyclones moving inland produce heavy rains and gusty winds throughout the area.

The average mean temperature for the year is in the low 60's, varying from the low 40's in January to the low 80's in July. A record high of 106 degrees F. has been recorded during both the months of June and July. Temporary relief from the high temperatures occur during the fall with cold fronts passing occasionally through the area. With the onset of winter, radical temperature changes become more common, with a 50 degree temperature

drop during a cold frontal passage being not at all uncommon.

Precipitation of 47 inches per year is fairly well distributed throughout the year, with the only frozen or freezing precipitation occurring during the winter when the Texas panhandle lows pass just south of the station. Relative humidity averages about 70% for the year.

Visibility throughout the area is generally good; however, it is reduced to less than 1 mile if a stationary front or a slow moving warm front is in the area. Winds from the south to west-southwest may also reduce visibility to 3 miles as they bring smoke from the industrial sites over the station. Haze in the area usually reduces visibility to 5 miles.

Flying conditions are generally good with ceilings and visibilities greater than 1,000 feet and 3 miles more than 80% of the time even during the bad weather months of winter. During the months of May, June, and July Visual Flight Rules (VFR) are experienced more than 96% of the time. Thunderstorms are the principal cause of reduction in flight operations during the summer months. The low ceilings and visibilities brought on by these storms are usually of short duration.

MEMPHIS, TENNESSEE



STN LTRS: KNQA  
WBAN #: 93859  
WMO #:

	ECIP	T H V	US S B	MEAN NUMBER OF DAYS OCCURRENCE OF:
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[illegible]

NOV	DEC	ANN	EVR
22	31	18	28
27	35	21	28
32	39	26	30
32	40	28	30
31	39	35	30
28	36	30	30
24	33	21	30
22	30	18	30
27	30	25	29
6	12	5	28
8	12	6	28
10	15	9	30
11	16	10	30
11	14	5	30
6	11	5	30
4	11	4	30
5	11	4	29
7	13	6	29
1	4	2	28
2	4	2	28
4	5	3	30
3	5	2	30
1	4	1	30
1	3	1	30
1	3	1	30
2	4	2	29
0	2	0	28
1	2	1	28
1	2	1	30
0	0	0	30
0	0	0	30
0	0	0	30
0	0	0	30
0	1	0	30
0	1	0	30



## TOTAL PRECIPITATION INCHES

Year	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1945	W	7.66	5.25	6.45	9.78	6.10	7.22	5.05	2.71	12.62	6.44	W
1946	W	5.31	6.59	6.62	W	W	W	W	W	W	W	W
1947	W	W	W	W	W	W	W	W	W	W	W	W
1948	W	W	W	W	W	W	W	W	W	W	W	W
1949	W	W	W	W	1.239	2.61	1.109	7.66	.59	6.16	W	W
1950	W	W	W	W	W	W	W	W	W	W	W	W
1951	3.23	4.61	7.01	2.26	2.05	.78	.67	2.19	2.92	6.66	4.19	33.64
1952	3.52	4.22	1.80	1.21	1.91	3.08	4.79	W	1.32	3.60	1.49	W
1953	5.72	4.22	7.84	3.12	3.40	3.53	2.51	2.78	2.88	1.35	4.16	35.26
1954	9.42	4.10	1.48	1.28	1.58	1.40	1.40	1.40	1.40	1.40	1.40	W
1955	1.63	6.62	7.04	3.55	4.09	5.45	3.34	1.56	1.44	1.37	2.37	1.12
1956	5.45	4.28	3.46	3.26	2.20	2.25	2.49	1.44	1.37	3.08	3.11	45.68
1957	2.68	4.17	4.55	1.88	1.92	2.42	3.90	2.57	7.13	1.50	2.65	46.73
1958	2.68	4.17	4.55	1.88	1.92	2.42	3.90	2.57	7.13	1.50	2.65	46.73
1959	4.06	7.31	1.11	1.93	1.40	1.84	6.40	3.92	1.66	1.07	2.36	4.71
1960	3.28	7.39	3.11	3.10	3.39	3.48	3.19	2.85	5.67	3.70	5.21	42.49
1961	1.38	4.08	7.18	4.39	6.38	2.97	4.46	4.85	4.67	7.77	6.23	37.03
1962	4.82	3.45	3.45	1.08	3.16	4.37	2.16	8.06	3.77	1.41	3.45	44.01
1963	4.82	3.45	3.45	1.08	3.16	4.37	2.16	8.06	3.77	1.41	3.45	44.01
1964	3.52	7.07	6.34	4.32	2.01	2.08	2.22	2.28	2.06	2.16	4.46	35.35
1965	3.16	3.20	3.12	3.06	5.30	4.23	2.46	7.86	.39	2.01	.88	45.73
1966	1.56	3.78	3.56	3.25	5.07	1.63	1.66	2.03	1.45	2.17	1.43	33.66
1967	1.56	3.78	3.56	3.25	5.07	1.63	1.66	2.03	1.45	2.17	1.43	33.66
1968	5.09	1.49	7.11	6.35	6.68	2.00	1.36	2.52	2.95	1.69	3.52	45.20
1969	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1970	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1971	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1972	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1973	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1974	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1975	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1976	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1977	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1978	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1979	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1980	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1981	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1982	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1983	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1984	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1985	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1986	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1987	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1988	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1989	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1990	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1991	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1992	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1993	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1994	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1995	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1996	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1997	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1998	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
1999	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2000	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2001	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2002	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2003	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2004	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2005	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2006	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2007	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2008	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2009	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2010	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2011	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2012	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2013	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2014	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2015	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2016	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2017	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2018	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2019	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2020	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2021	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2022	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2023	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2024	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2025	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2026	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2027	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2028	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2029	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2030	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2031	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2032	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2033	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2034	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2035	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2036	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2037	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2038	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2039	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2040	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2041	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2042	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2043	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2044	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2045	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2046	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2047	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2048	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97
2049	1.56	1.36	4.23	.90	1.26	7.40	.88	1.34	2.38	3.34	3.37	33.97

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1945	0	0	51	44	137	337	448	449	326	35	39	0	1,386
1946	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1947	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1948	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1949	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1950	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1951	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1952	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1953	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1954	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1955	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1956	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1957	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1958	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1959	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1960	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1961	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1962	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1963	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1964	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1965	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1966	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1967	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1968	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1969	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1970	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1971	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1972	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1973	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1974	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1975	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1976	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1977	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1978	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1979	0	0	48	48	100	191	251	251	100	100	100	0	1,048
1980	0	0	48	48	100	191	251	251	100	100	100	0	1,048

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FEET)		CALL SIGN		WIND NUMBER	
93839		Memphis, Tennessee		35°21'N		89°52'W		322		KNQA			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARREL LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, main deck operations building	Navy	1949	1960	35°21'N	89°52'W	295	Mercurial	24				
2.	Moved within weather office	"	1960	1968	"	"	"	"	24				
3.	Replacement installed	"	1968		"	"	"	"	24				
1a.	Weather service office	"	1960		"	"	"	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1. Installed		Atop control tower	3 cup		67.3'	1. Barograph
1a. *		"	Selsyn	Triple	68.9'	2. Semi-auto met. station (AN/GMQ-14A)
2.		"	AN-UMQ-5	RD-108	67.3'	3. Ceiling light (ML-121)
3.	1953	1500' 350° from ops bldg, N-Z	AN/UMQ-5C	"	12'	4. Cloud height set (AN/GMQ-13B)
4.	1958	Same as above	"	"	8'	5. Transmissometer (AN/GMQ-10C)
	1962					6. Wind measuring set (AN/PMQ-3)
		* Survey date unknown				

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Station Meridian is located about 17 miles northeast of the city of Meridian, Mississippi. Small hills to the north, east, and west cause cold air drainage during periods of light or calm winds which results in lower minimum temperatures than might normally be expected. The Gulf of Mexico, about 150 miles to the south, is the most significant single factor influencing the Meridian weather. The frequent southerly flow from the Gulf causes mild winters and long warm summers.

Flying weather is generally very good at Meridian with Visual Flight Rules (VFR) prevailing 84% of the time. This varies from an average of 79% VFR in January to 93.5% in July. Visibilities average 6 miles or more 81.6% of the time annually, ranging from an average of 76.5% in January to 87% in October. The most significant obstruction to vision is the morning fog occurring frequently during winter months. From August through April the period from 0600 to 0800 daily is the time of the most frequent occurrence of fog while from May through July it is the 0300 to 0500 local time.

The prevailing wind direction generally is northerly during the

months of August through February, southerly during March and April, and variable during May through July. Average monthly speeds are generally between 3 and 4 knots with daily averages occasionally as high as 10 to 15 knots during February and March.

Rainfall is fairly evenly distributed during the year in the Meridian area. An average amount of 4.3 inches a month may be expected. The highest amount recorded at the Naval Air Station in any one month was 15.05 inches in March 1976 and the lowest was a trace in October 1963.

The Meridian area is seldom affected by hurricanes. The remnants of such storms passing near Meridian usually cause moderate to heavy rain with little wind. The most destructive weather that may be encountered around the Meridian area would be tornadoes. Although only a few have been reported near Meridian, they are usually more frequent in the western part of Mississippi. The tornado season generally runs from December through March with the maximum occurrence during the month of February.

**MERIDIAN, MISSISSIPPI**



STN LTRS: KNMM  
WBAN # : 03866  
WMD # : 72234

PERIOD: AUG 61-DEC 77  
ELEV : 317

STATION NAME: MERIDIAN, MISSISSIPPI  
LOCATION : N32 33 W88 34

PREPARED BY: NMSD ASHEVILLE  
JUNE 1978

TEMPERATURE DEG. F		PRECIPITATION INCHES		SNOWFALL RELATIVE		DEW PRESS		SPEC WINDS		MEAN PRECIP		SNOWFALL		NT		Y		MAX		MIN	
MEAN		EXTREMES		H		IN PT		ALT PVLG		CLD		1.5		DR		FOG		P		AND	
DAILY		MAX		MIN		HR		MG		F		99.95%		GTR		GTR		GTR		GTR	
MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX	
JAN		56		33		45		80		1		5.0		9.3		2.2		4.2		1	
FEB		60		34		47		85		1		5.0		9.3		2.2		4.2		1	
MAR		68		42		55		88		1		5.0		9.3		2.2		4.2		1	
APR		77		51		64		89		1		5.0		9.3		2.2		4.2		1	
MAY		82		58		70		96		1		5.0		9.3		2.2		4.2		1	
JUN		88		65		77		102		1		5.0		9.3		2.2		4.2		1	
JUL		91		69		80		102		1		5.0		9.3		2.2		4.2		1	
AUG		91		69		80		102		1		5.0		9.3		2.2		4.2		1	
SEP		85		63		75		98		1		5.0		9.3		2.2		4.2		1	
OCT		77		50		64		94		1		5.0		9.3		2.2		4.2		1	
NOV		66		41		54		86		1		5.0		9.3		2.2		4.2		1	
DEC		59		36		48		80		1		5.0		9.3		2.2		4.2		1	
ANN		75		51		63		102		1		5.0		9.3		2.2		4.2		1	
EVR		16		16		16		16		16		16		16		16		16		16	

REMARKS: \*DATA NOT AVAILABLE. # LESS THAN 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE.  
THE VALUE LISTED UNDER "PRESS ALT FEET 99.95%" INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME.  
EVR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, PDR).

FLYING WEA & HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
CEILING		00	38	39	30	27	36	20	18	14	12	17	12	11	13	19	16	16	17	26	37	30	28	21	21	16	16	16	
LESS 5000		03	46	32	27	27	34	10	10	10	12	17	20	20	25	25	32	33	30	35	41	39	35	26	33	16	16	16	
FT AND/OR		06	47	34	39	34	38	9	9	6	21	27	27	19	19	32	38	33	35	39	44	44	44	31	36	16	16	16	
VISIBILITY		09	46	36	34	24	31	4	4	3	40	47	40	47	42	42	48	47	47	47	50	50	50	41	36	16	16	16	
LESS 5 MI		12	40	33	36	32	36	3	3	2	30	36	30	36	36	42	48	47	47	47	50	50	50	30	30	16	16	16	
		15	39	31	33	25	25	18	15	15	10	16	16	16	16	14	16	16	16	16	16	16	23	20	20	16	16	16	
		18	35	25	25	18	25	15	12	12	6	12	12	12	12	8	13	13	13	13	13	13	19	19	19	16	16	16	
		21	35	24	25	15	25	12	12	21	18	21	21	21	21	20	23	23	23	23	23	23	27	27	27	16	16	16	
ALL HRS		21	35	24	25	12	25	12	12	21	18	21	21	21	21	20	23	23	23	23	23	23	27	27	27	16	16	16	
		00	20	10	9	5	9	5	5	5	2	2	2	2	2	3	3	7	7	5	5	12	12	8	12	16	16	16	
LESS 1000		03	23	13	12	10	18	6	6	6	9	11	9	11	16	16	21	21	15	9	9	14	18	18	14	16	16	16	
FT AND/OR		06	27	15	18	9	14	4	4	3	1	2	2	2	0	0	5	5	3	3	3	6	10	10	7	16	16	16	
VISIBILITY		09	25	19	17	10	17	7	7	2	1	2	2	2	1	1	1	4	4	3	3	7	13	13	5	16	16	16	
LESS 3 MI		12	19	8	7	3	7	3	3	2	1	2	2	2	2	2	2	4	4	3	3	7	13	13	5	16	16	16	
		15	15	8	7	3	7	3	3	2	1	2	2	2	2	2	2	4	4	3	3	7	13	13	5	16	16	16	
		18	15	9	7	3	7	3	3	2	1	2	2	2	2	2	2	4	4	3	3	7	13	13	5	16	16	16	
		21	15	8	7	3	7	3	3	2	1	2	2	2	2	2	2	4	4	3	3	7	13	13	5	16	16	16	
ALL HRS		20	15	11	10	7	10	7	7	6	3	3	3	4	4	5	10	10	7	7	11	11	10	10	6	16	16	16	
		00	8	4	2	2	4	2	2	2	1	1	1	0	0	1	1	2	2	2	4	4	3	8	3	16	16	16	
LESS 400		03	9	5	4	4	8	2	2	7	3	3	3	3	7	9	9	9	9	7	7	7	4	3	5	16	16	16	
FT AND/OR		06	12	6	3	3	6	6	6	1	0	0	0	1	1	1	1	2	2	3	3	10	10	8	4	16	16	16	
VISIBILITY		09	11	6	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1	5	16	16	16	
LESS 1 MI		12	6	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	16	16	16	
		15	4	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	16	16	16	
		18	7	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	16	16	16	
		21	8	2	1	1	1	1	1	1	0	0	0	0	0	1	1	1	1	1	1	1	1	1	2	16	16	16	
ALL HRS		8	8	3	3	2	3	2	2	2	1	1	1	2	2	2	2	3	3	2	2	5	5	3	3	16	16	16	
		00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	16	16	16	
LESS 100		03	2	1	1	1	3	1	1	1	1	1	1	1	2	2	2	1	1	1	1	2	2	1	2	16	16	16	
FT AND/OR		06	2	1	1	1	3	1	1	1	1	1	1	1	2	2	2	1	1	1	1	2	2	1	2	16	16	16	
VISIBILITY		09	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	
LESS 1/4 MI		12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	
		15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	
		18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	
		21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	16	16	
ALL HRS		1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	16	16	16



# MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1961	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1962	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1963	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1964	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1965	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1966	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1967	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1968	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1969	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1970	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1971	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1972	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1973	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1974	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1975	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1976	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
1977	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4
MEAN	47.4	49.4	51.6	53.0	54.2	55.2	55.4	54.2	51.6	47.4	42.7	38.4	50.4

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1961	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1962	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1963	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1964	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1965	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1966	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1967	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1968	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1969	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1970	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1971	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1972	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1973	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1974	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1975	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1976	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
1977	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
MEAN	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04

# HEATING DEGREE DAYS

Season	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
60-61	137	137	137	137	137	137	137	137	137	137	137	137	137
61-62	137	137	137	137	137	137	137	137	137	137	137	137	137
62-63	137	137	137	137	137	137	137	137	137	137	137	137	137
63-64	137	137	137	137	137	137	137	137	137	137	137	137	137
64-65	137	137	137	137	137	137	137	137	137	137	137	137	137
65-66	137	137	137	137	137	137	137	137	137	137	137	137	137
66-67	137	137	137	137	137	137	137	137	137	137	137	137	137
67-68	137	137	137	137	137	137	137	137	137	137	137	137	137
68-69	137	137	137	137	137	137	137	137	137	137	137	137	137
69-70	137	137	137	137	137	137	137	137	137	137	137	137	137
70-71	137	137	137	137	137	137	137	137	137	137	137	137	137
71-72	137	137	137	137	137	137	137	137	137	137	137	137	137
72-73	137	137	137	137	137	137	137	137	137	137	137	137	137
73-74	137	137	137	137	137	137	137	137	137	137	137	137	137
74-75	137	137	137	137	137	137	137	137	137	137	137	137	137
75-76	137	137	137	137	137	137	137	137	137	137	137	137	137
76-77	137	137	137	137	137	137	137	137	137	137	137	137	137
77-78	137	137	137	137	137	137	137	137	137	137	137	137	137
MEAN	137	137	137	137	137	137	137	137	137	137	137	137	137

# COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1961	0	0	0	0	0	0	0	0	0	0	0	0	0
1962	0	0	0	0	0	0	0	0	0	0	0	0	0
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	0	0	0	0	0	0	0	0	0	0	0	0	0
1972	0	0	0	0	0	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

MERIDIAN, MISSISSIPPI



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
03866		Meridian, Mississippi		32° 33' N		88° 34' W		317		KNMM		72234	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, on east bulkhead	Navy	1963	1976	32° 33' N	88° 34' W	288	Mercurial	24				
1a.	Weather service office in GMQ-14 console	"	1965		"	"	290	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed 1961	805 feet east of centerline, 500 feet south approach end 18L	UMQ-5C	RD-108B	15'	1. Barograph 2. Auto met. station (AN-GMQ-29) 3. Cloud height set (AN/GMQ-13) 4. Transmissometer (AN/GMQ-10C) 5. Radar (AN/FPS-106) 6. Cloud height set (AN/GMQ-13) 7. RVR (ID 1346/GMQ-10)
2.	Relocated 1976	200 feet west of centerline 500 feet north approach end 36L	UMQ-5	RD-108	13'	
3.	1977	300 feet south of centerline 2100 feet west of approach end 27	UMQ-5	GMQ-29A	13'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Midway Islands, approximately 1,100 nautical miles west northwest of the principal islands of Hawaii, consist of two habitable and usable islands and several smaller islands and sandspits. The two main islands, Sand and Eastern, lie within a nearly circular reef that has a diameter of about 6 miles. This reef ranges in height from slightly below the surface to 4 or 5 feet above the surface. Sand Island is about 2 miles long by 1 mile wide. The terrain is flat and sandy, attaining a maximum elevation of only 29 feet above sea level.

Midway essentially experiences two climatic seasons, summer and winter. The summer season, characterized by northeasterly trade winds and fair weather cumulus clouds, begins in late March or early April and lasts into late November or early December. This season has mostly scattered to broken cumuliiform clouds, bases at 1,800 to 3,000 feet, with occasional brief rain showers. Frontal passages are almost nonexistent. Occasionally, an easterly wave will move into the Midway region from the east - southeast and produce two or three days of low cloudiness and rain. By December cold frontal passages at Midway are quite common. During December the prevailing surface winds shift to west - southwest, a direction that will persist into March. Sustained periods of strong

gusty winds are prevalent through the winter months, particularly when associated with frontal passages. Periods of moderate to heavy rain also occur frequently during winter months but rarely cause marginal flying weather for more than 3 or 4 hours. On a few occasions when local area weather is severe enough to curtail flight operations, it is more likely that the deterrent will be strong runway cross - winds rather than low ceilings and visibilities.

Fog is of little significance. It occurs chiefly in conjunction with winter rains and ending when the rain stops. Typhoons frequently form out of easterly waves which have passed Midway but have never affected the islands. Thunderstorms are observed at the station on an average of only 7 days a year.

Although the reef acts as an effective breakwater in destroying large ocean waves and swells approaching the island, it does not prevent an excess of water from building up inside the reef causing unusually strong currents during periods of strong winds. These currents, in conjunction with the strong winds that brought about their formation, makes shiphandling very difficult and hazardous inside the lagoon.

MIDWAY ISLAND



PREPARED BY: MNSD ASHEVILLE  
JUNE 1978

STATION NAME: MIDWAY ISLAND  
LOCATION: 1 N28 12 W177 23

PERIOD: APR 45-DEC 77  
ELEV: 13

STN LTRS: PMOY  
MBAN # 1 22701  
WMO # 1 91066

TEMPERATURE		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		HUMIDITY		WIND		SPEED		PRESS		SFC		WINDS		MEAN PRECIP		INCHES		SNOWFALL		MT		Y		MAX		MIN	
DAILY MEAN		EXTREMES		WIND		MAX		MIN		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX		MAX	
JAN 69		62		66		80		51		4.9		9.3		1.8		5.0		0		0		0		0		0		0		0		0		0	
FEB 70		62		66		81		51		3.8		8.1		1.9		3.1		0		0		0		0		0		0		0		0		0	
MAR 71		63		67		81		51		3.2		13.1		1.8		3.9		0		0		0		0		0		0		0		0		0	
APR 71		64		68		82		53		2.3		11.8		2.2		5.0		0		0		0		0		0		0		0		0		0	
MAY 72		68		72		86		59		2.5		12.9		2.2		6.8		0		0		0		0		0		0		0		0		0	
JUN 80		72		76		88		61		2.5		13.4		2.2		7.3		0		0		0		0		0		0		0		0		0	
JUL 82		74		78		88		63		3.5		13.3		2.6		3.8		0		0		0		0		0		0		0		0		0	
AUG 83		75		79		89		64		4.2		10.8		1.1		4.6		0		0		0		0		0		0		0		0		0	
SEP 83		75		79		89		64		3.3		7.4		1.7		3.7		0		0		0		0		0		0		0		0		0	
OCT 79		72		76		88		60		3.3		10.0		2.5		6.2		0		0		0		0		0		0		0		0		0	
NOV 76		63		69		80		51		4.1		12.3		1.0		3.5		0		0		0		0		0		0		0		0		0	
DEC 72		63		69		80		51		4.1		17.9		1.0		3.5		0		0		0		0		0		0		0		0		0	
ANN 76		68		72		89		50		41.9		17.9		1.0		7.3		0		0		0		0		0		0		0		0		0	
EVR 29		29		29		29		29		29		29		29		29		29		29		29		29		29		29		29		29		29	
REMARKS:		*DATA NOT AVAILABLE.		# LESS THAN 0.50 INCHES OR 0.05 INCHES, OR 0.5 PERCENT AS APPLICABLE.		THE VALUE LISTED UNDER PRESS ALT FEET 92.95% INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME.		EVR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM TMP OVERALL PERIOD OF RECORD, PDR).																											

FLYING HGT & HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
CEILING		01	2	1	2	2	2	2	2	2	2	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	1	
LESS 1000		04	1	1	1	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
PT AND/OR		07	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
VISIBILITY		10	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
LESS 3 MI		13	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
LESS 5 MI		16	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
ALL HRS		22	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1	1	1	1	1	1	
CEILING		01	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 500		04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PT AND/OR		07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VISIBILITY		10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 1 MI		13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 3 MI		16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ALL HRS		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CEILING		01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 200		04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PT AND/OR		07	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
VISIBILITY		10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 1/2 MI		13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
LESS 3 MI		16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
ALL HRS		22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1906	2,677	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1907	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1908	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1909	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1910	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1911	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1912	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1913	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1914	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1915	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1916	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1917	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1918	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1919	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1920	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1921	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1922	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1923	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1924	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1925	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1926	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1927	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1928	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1929	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1930	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1931	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1932	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1933	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1934	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1935	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1936	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1937	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1938	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1939	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1940	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1941	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1942	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1943	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1944	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1945	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1946	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1947	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1948	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1949	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1950	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1951	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1952	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1953	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1954	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1955	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1956	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1957	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1958	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1959	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1960	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1961	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1962	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1963	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1964	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1965	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1966	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1967	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1968	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1969	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1970	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1971	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1972	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1973	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1974	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1975	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1976	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1977	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1978	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1979	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1980	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1981	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1982	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1983	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1984	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1985	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1986	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1987	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1988	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1989	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1990	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1991	2,697	3,623	4,245	4,644	4,088	1,773	4,822	1,256	1,485	322	1,211	5,721	29,220
1992	2,697	3,623	4,245	4,644	4,088	1,773	4,822						

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct	Nov.	Dec.	Total
1909	64	83	151	224	224	370	566	426	422	405	555	132	3172
1910	66	89	99	138	231	371	571	426	422	405	555	132	3172
1911	66	89	99	138	231	371	571	426	422	405	555	132	3172
1912	66	89	99	138	231	371	571	426	422	405	555	132	3172
1913	78	70	116	144	241	351	488	438	438	438	500	104	3082
1914	78	70	116	144	241	351	488	438	438	438	500	104	3082
1915	78	70	116	144	241	351	488	438	438	438	500	104	3082
1916	78	70	116	144	241	351	488	438	438	438	500	104	3082
1917	78	70	116	144	241	351	488	438	438	438	500	104	3082
1918	78	70	116	144	241	351	488	438	438	438	500	104	3082
1919	78	70	116	144	241	351	488	438	438	438	500	104	3082
1920	78	70	116	144	241	351	488	438	438	438	500	104	3082
1921	78	70	116	144	241	351	488	438	438	438	500	104	3082
1922	78	70	116	144	241	351	488	438	438	438	500	104	3082
1923	78	70	116	144	241	351	488	438	438	438	500	104	3082
1924	78	70	116	144	241	351	488	438	438	438	500	104	3082
1925	64	48	42	81	261	362	414	406	391	317	187	97	2713
1926	41	48	72	77	171	241	366	401	389	240	148	78	2502
1927	25	41	48	77	171	241	366	401	389	240	148	78	2502
1928	19	19	40	101	188	235	335	417	447	223	149	384	2443
1929	19	19	40	101	188	235	335	417	447	223	149	384	2443
1930	9	32	107	36	126	216	316	417	421	376	137	184	2620
1931	9	32	107	36	126	216	316	417	421	376	137	184	2620
1932	97	17	127	86	228	386	416	445	422	368	100	146	2765
1933	47	48	99	86	130	289	393	422	422	318	244	147	2608
1934	47	48	99	86	130	289	393	422	422	318	244	147	2608
1935	31	37	77	76	141	250	373	438	436	364	203	179	2377
1936	31	37	77	76	141	250	373	438	436	364	203	179	2377
1937	130	106	80	52	137	300	395	403	420	368	203	98	2996
1938	130	106	80	52	137	300	395	403	420	368	203	98	2996
1939	16	99	81	67	156	276	384	405	402	360	180	138	2526
1940	16	99	81	67	156	276	384	405	402	360	180	138	2526
1941	136	27	8	104	135	296	371	443	440	408	96	131	2396
1942	7	7	13	46	131	260	440	449	441	356	96	131	2396
1943	4	39	36	126	260	315	441	425	400	318	175	115	2763
1944	4	39	36	126	260	315	441	425	400	318	175	115	2763
1945	46	27	28	219	281	332	393	396	371	272	260	138	2929
1946	46	27	28	219	281	332	393	396	371	272	260	138	2929
1947	24	36	14	36	260	316	406	441	405	270	231	93	2677
1948	24	36	14	36	260	316	406	441	405	270	231	93	2677
1949	75	76	57	166	303	401	480	436	422	303	232	138	3207
1950	75	76	57	166	303	401	480	436	422	303	232	138	3207
1951	75	76	57	166	303	401	480	436	422	303	232	138	3207
1952	75	76	57	166	303	401	480	436	422	303	232	138	3207
1953	75	76	57	166	303	401	480	436	422	303	232	138	3207
1954	75	76	57	166	303	401	480	436	422	303	232	138	3207
1955	75	76	57	166	303	401	480	436	422	303	232	138	3207
1956	75	76	57	166	303	401	480	436	422	303	232	138	3207
1957	75	76	57	166	303	401	480	436	422	303	232	138	3207
1958	75	76	57	166	303	401	480	436	422	303	232	138	3207
1959	75	76	57	166	303	401	480	436	422	303	232	138	3207
1960	75	76	57	166	303	401	480	436	422	303	232	138	3207
1961	75	76	57	166	303	401	480	436	422	303	232	138	3207
1962	75	76	57	166	303	401	480	436	422	303	232	138	3207
1963	75	76	57	166	303	401	480	436	422	303	232	138	3207
1964	75	76	57	166	303	401	480	436	422	303	232	138	3207
1965	75	76	57	166	303	401	480	436	422	303	232	138	3207
1966	75	76	57	166	303	401	480	436	422	303	232	138	3207
1967	75	76	57	166	303	401	480	436	422	303	232	138	3207
1968	75	76	57	166	303	401	480	436	422	303	232	138	3207
1969	75	76	57	166	303	401	480	436	422	303	232	138	3207
1970	75	76	57	166	303	401	480	436	422	303	232	138	3207
1971	75	76	57	166	303	401	480	436	422	303	232	138	3207
1972	75	76	57	166	303	401	480	436	422	303	232	138	3207
1973	75	76	57	166	303	401	480	436	422	303	232	138	3207
1974	75	76	57	166	303	401	480	436	422	303	232	138	3207
1975	75	76	57	166	303	401	480	436	422	303	232	138	3207
1976	75	76	57	166	303	401	480	436	422	303	232	138	3207
1977	75	76	57	166	303	401	480	436	422	303	232	138	3207
1978	75	76	57	166	303	401	480	436	422	303	232	138	3207
1979	75	76	57	166	303	401	480	436	422	303	232	138	3207
1980	75	76	57	166	303	401	480	436	422	303	232	138	3207
1981	75	76	57	166	303	401	480	436	422	303	232	138	3207
1982	75	76	57	166	303	401	480	436	422	303	232	138	3207
1983	75	76	57	166	303	401	480	436	422	303	232	138	3207
1984	75	76	57	166	303	401	480	436	422	303	232	138	3207
1985	75	76	57	166	303	401	480	436	422	303	232	138	3207
1986	75	76	57	166	303	401	480	436	422	303	232	138	3207
1987	75	76	57	166	303	401	480	436	422	303	232	138	3207
1988	75	76	57	166	303	401	480	436	422	303	232	138	3207
1989	75	76	57	166	303	401	480	436	422	303	232	138	3207
1990	75	76	57	166	303	401	480	436	422	303	232	138	3207
1991	75	76	57	166	303	401	480	436	422	303	232	138	3207
1992	75	76	57	166	303	401	480	436	422	303	232	138	3207
1993	75	76	57	166	303	401	480	436	422	303	232	138	3207
1994	75	76	57	166	303	401	480	436	422	303	232	138	3207
1995	75	76	57	166	303	401	480	436	422	303	232	138	3207
1996	75	76	57	166	303	401	480	436	422	303	232	138	3207
1997	75	76	57	166	303	401	480	436	422	303	232	138	3207
1998	75	76	57	166	303	401	480	436	422	303	232	138	3207
1999	75	76	57	166	303	401	480	436	422	303	232	138	3207
2000	75	76	57	166	303	401	480	436	422	303	232	138	3207
2001	75	76	57	166	303	401	480	436	422	303	232	138	3207
2002	75	76	57	166	303	401	480	436	422	303	232	138	3207
2003	75	76	57	166	303	401	480	436	422	303	232	138	3207
2004	75	76	57	166	303	401	480	436	422	303	232	138	3207
2005	75	76	57	166	303	401	480	436	422	303	232	138	3207
2006	75	76	57	166	303	401	480	436	422	303	232	138	3207
2007	75	76	57	166	303	401	480	436	422	303	232	138	3207
2008	75	76	57	166	303	401	480	436	422	303	232	138	3207
2009	75	76	57	166	303	401	480	436	422	303	232	138	3207
2010	75	76	57	166	303	401	480	436	422	303	232	138	3207
2011	75	76	57	166	303	401	480	436	422	303	232	138	3207
2012	75	76	57	166	303	401	480	436	422	303	232	138	3207
2013	75	76	57	166	303	401	480	436	422	303	232	138	3207
2014	75	76	57	166	303	401	480	436	422	303	232	138	3207
2015	75	76	57	166	303	401	480	436	422	303	232	138	3207

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1909	66.5	67.7	68.7	72.2	72.0	77.1	77.3	78.6	78.8	78.3	78.3	85.0	77.4
1910	67.5	67.9	68.5	69.8	69.8	72.8	73.0	74.0	74.0	74.0	74.0	74.0	72.1
1911	67.0	67.5	68.0	68.5	68.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.1
1912	66.2	67.0	68.5	69.5	70.5	77.1	77.7	78.6	78.6	78.6	78.6	71.7	73.1
1913	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1914	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1915	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1916	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1917	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1918	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1919	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1920	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1921	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1922	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1923	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1924	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1925	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1926	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1927	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1928	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1929	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1930	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1931	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1932	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1933	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1934	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1935	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1936	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1937	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1938	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1939	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1940	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1941	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1942	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1943	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1944	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1945	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1946	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1947	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1948	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1949	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1950	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1951	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1952	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1953	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1954	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1955	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1956	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1957	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1958	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1959	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1960	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1961	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1962	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1963	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1964	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1965	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1966	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1967	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1968	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1969	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1970	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1971	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1972	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1973	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1974	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1975	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1976	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1977	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1978	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1979	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1980	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1981	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1982	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1983	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1984	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1985	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1986	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1987	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1988	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1989	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1990	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1991	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1992	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1993	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1994	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1995	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1996	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1997	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1998	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
1999	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
2000	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
2001	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
2002	66.5	67.0	68.0	68.5	69.5	72.5	72.5	73.5	73.5	73.5	73.5	73.5	72.0
2003	66.5	67.0	68.0	68.5	69.5	72.5	72.5						

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
22701		Midway Island		28°12'N		177°23'W		13		PMDY		91066	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF SAFLC LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office on top of command post building	Navy	1949	1958	28°12'N	177°23'W	42.4	Mercurial	24				
2.	Same as above	"	1958	1961	"	"	32	"	24				
3.	Weather office	"	1961		"	"	34	"	24				
1a.	GMQ-14 console	"	1972		"	"	34						

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		Atop building #521	Selsyn	Double register	91' MSL	1. Barograph (ML-3)
2.	Relocated 1954	Atop building #585	"	"	82' MSL	2. Semi-auto met station (AN/GMQ-14A)
3.	Installed 1955	Atop building #581	AN/UMQ-5	RD-108	72' MSL	3. Ceiling light (ML-121)
4.	1958	Air operations hangar roof	"	RD-108B	93' MSL	4. Cloud height set (AN/GMQ-B)
5.	1960	2051' S. weather office	AN/UMQ-5C	"	15'	5. Theodolite (ML-247)
						6. Radiosonde/Rawinsonde set (AN/GMD-10B)
						7. APT System (AN/GKR-7)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Miramar is located 12 miles north of downtown San Diego and about 7 1/2 miles inland from the Pacific Coast.

The station is situated on a mesa which has an average elevation of about 450 feet. Eastward of the mesa the Laguna Mountain range dominates, with peaks rising to 6,500 feet. East of the Laguna Mountains lies the Imperial Valley and the Salton Sea.

Miramar's climate is a subtropical Steppe climate, characterized by warm dry summers, moderate winters and frequent fog. The principal climatic controls are the semi-permanent subtropical ridge with its shallow, fog-producing marine layer and pronounced, smoke-trapping low-level inversion; and the cool California current which restricts the mean temperatures to a 15 degree range. The main special phenomena is the Santa Ana condition, which occurs chiefly in the summer and early fall. It is characterized by hot, dry, easterly winds. Although Miramar rarely experiences the strong winds associated with the Santa Ana, it is subjected to temperatures in the mid 90's to low 100's during the cycle. Humidities at those times are extremely low and fire conditions are greatly increased.

Flying weather is generally good. Fog and coastal low cloudiness are the major weather hazards to flying safety. On a seasonal basis, fog and low clouds are nearly twice as prevalent from June through November with the worst month being July during which some 16 days have fog and low clouds. The least cloudy and foggy month is February, which has a mean of only 8 days with these phenomena. On a diurnal basis this fog/low cloudiness is confined almost exclusively to the hours between midnight and 0900 local time.

Few fronts pass through Miramar, especially during the spring and summer months. Very often, even during the winter months, frontal passages are hailed only by extensive middle level cloudiness.

Precipitation consists almost exclusively of rain or rain showers associated with frontal passages from November through March. More than 75% of the 10 inches of annual precipitation falls during these months. The dearth of rain is, however, considerably compensated by a deposit of some 15 inches of dew annually.

Temperatures are mild as befits a locale dominated by a marine layer which overlies a cold current. The extreme minimum temperature is 28 degrees F. in January. The absolute maximum temperature was 111 degrees F., and occurred as might be expected during the Santa Ana condition in September.

Surface winds undergo both seasonal and diurnal variations. During the winter and spring, the northwesterly sea breeze commences about 1100 LST and lasts until about 1600 LST. Easterly winds prevail at other hours. During the summer and fall months, the sea breeze commences about 0900 LST and endures until 1700 LST. At night the winds become easterly again, or calm. Thus, due to the diurnal variation of the sea-land breeze, the prevailing winds shift from easterly in the winter and spring to westerly during the summer and fall.

Destructive storms, high winds, thunderstorms, and snow are extremely rare at Miramar; however, the Laguna Mountains harbor strong Santa Ana winds, clear air turbulence and occasional summertime thunderstorms.

MIRAMAR, CALIFORNIA



STN LYRS: KNKX  
HDAN # : 92107  
HMD # :

[illegible]

MARKS: \*DATA NOT AVAILABLE. # LESS THAN 0.5 DAY, 0.5 OR 0.05 INCH, OR THE VALUE LISTED UNDER "PRESS ALT FEET 99.95" INDICATES IT IS MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, 99%).

TESTING WEA	% WRS	EST	JAN	FEB	MAR	APR	MAY	JUN
ILLING	01	31	34	35	42	46	56	55
SS 1000	04	14	17	17	18	18	25	41
AND/OR	07	26	24	24	25	21	31	47
STABILITY	10	23	20	15	12	11	31	38
SS 5 MI	13	18	15	13	8	9	6	8
SS 5 MI	16	17	14	14	11	9	9	7
SS 1 MI	19	15	13	10	9	11	18	12
SS 1 MI	22	12	15	13	16	18	18	29
SS 1 MI	22	18	16	15	15	18	23	23
ALL WRS	01	9	10	8	7	7	6	9
ILLING	04	8	8	10	10	13	11	14
SS 300	07	20	18	15	13	13	9	8
AND/OR	10	14	15	11	11	7	7	4
STABILITY	13	15	12	11	11	8	8	5
SS 1 MI	16	13	11	11	8	7	7	5
SS 1 MI	19	8	6	5	4	4	3	3
SS 1 MI	22	8	8	5	4	3	3	3
SS 1 MI	22	13	11	10	8	7	7	7
ALL WRS	01	7	8	6	5	5	3	3
ILLING	04	7	6	6	5	7	6	3
SS 100	07	18	16	12	10	10	6	4
AND/OR	10	14	14	10	7	7	7	4
STABILITY	13	14	12	11	7	7	8	5
SS 1/4 MI	16	13	11	11	8	8	7	3
SS 1/4 MI	19	6	5	4	3	3	3	3
SS 1/4 MI	22	7	6	5	3	2	2	1
SS 1/4 MI	22	11	10	8	6	6	5	4
ALL WRS	01	11	10	8	7	7	5	1



## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1967	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	1.46	1.47	1.48
1968	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.61
1969	1.62	1.63	1.64	1.65	1.66	1.67	1.68	1.69	1.70	1.71	1.72	1.73	1.74
1970	1.75	1.76	1.77	1.78	1.79	1.80	1.81	1.82	1.83	1.84	1.85	1.86	1.87
1971	1.88	1.89	1.90	1.91	1.92	1.93	1.94	1.95	1.96	1.97	1.98	1.99	2.00
1972	2.01	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.12	2.13
1973	2.14	2.15	2.16	2.17	2.18	2.19	2.20	2.21	2.22	2.23	2.24	2.25	2.26
1974	2.27	2.28	2.29	2.30	2.31	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39
1975	2.40	2.41	2.42	2.43	2.44	2.45	2.46	2.47	2.48	2.49	2.50	2.51	2.52
1976	2.53	2.54	2.55	2.56	2.57	2.58	2.59	2.60	2.61	2.62	2.63	2.64	2.65
1977	2.66	2.67	2.68	2.69	2.70	2.71	2.72	2.73	2.74	2.75	2.76	2.77	2.78
1978	2.79	2.80	2.81	2.82	2.83	2.84	2.85	2.86	2.87	2.88	2.89	2.90	2.91
1979	2.92	2.93	2.94	2.95	2.96	2.97	2.98	2.99	3.00	3.01	3.02	3.03	3.04
1980	3.05	3.06	3.07	3.08	3.09	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17
1981	3.18	3.19	3.20	3.21	3.22	3.23	3.24	3.25	3.26	3.27	3.28	3.29	3.30
1982	3.31	3.32	3.33	3.34	3.35	3.36	3.37	3.38	3.39	3.40	3.41	3.42	3.43
1983	3.44	3.45	3.46	3.47	3.48	3.49	3.50	3.51	3.52	3.53	3.54	3.55	3.56
1984	3.57	3.58	3.59	3.60	3.61	3.62	3.63	3.64	3.65	3.66	3.67	3.68	3.69
1985	3.70	3.71	3.72	3.73	3.74	3.75	3.76	3.77	3.78	3.79	3.80	3.81	3.82
1986	3.83	3.84	3.85	3.86	3.87	3.88	3.89	3.90	3.91	3.92	3.93	3.94	3.95
1987	3.96	3.97	3.98	3.99	4.00	4.01	4.02	4.03	4.04	4.05	4.06	4.07	4.08
1988	4.09	4.10	4.11	4.12	4.13	4.14	4.15	4.16	4.17	4.18	4.19	4.20	4.21
1989	4.22	4.23	4.24	4.25	4.26	4.27	4.28	4.29	4.30	4.31	4.32	4.33	4.34
1990	4.35	4.36	4.37	4.38	4.39	4.40	4.41	4.42	4.43	4.44	4.45	4.46	4.47
1991	4.48	4.49	4.50	4.51	4.52	4.53	4.54	4.55	4.56	4.57	4.58	4.59	4.60
1992	4.61	4.62	4.63	4.64	4.65	4.66	4.67	4.68	4.69	4.70	4.71	4.72	4.73
1993	4.74	4.75	4.76	4.77	4.78	4.79	4.80	4.81	4.82	4.83	4.84	4.85	4.86
1994	4.87	4.88	4.89	4.90	4.91	4.92	4.93	4.94	4.95	4.96	4.97	4.98	4.99
1995	5.00	5.01	5.02	5.03	5.04	5.05	5.06	5.07	5.08	5.09	5.10	5.11	5.12
1996	5.13	5.14	5.15	5.16	5.17	5.18	5.19	5.20	5.21	5.22	5.23	5.24	5.25
1997	5.26	5.27	5.28	5.29	5.30	5.31	5.32	5.33	5.34	5.35	5.36	5.37	5.38
1998	5.39	5.40	5.41	5.42	5.43	5.44	5.45	5.46	5.47	5.48	5.49	5.50	5.51
1999	5.52	5.53	5.54	5.55	5.56	5.57	5.58	5.59	5.60	5.61	5.62	5.63	5.64
2000	5.65	5.66	5.67	5.68	5.69	5.70	5.71	5.72	5.73	5.74	5.75	5.76	5.77
2001	5.78	5.79	5.80	5.81	5.82	5.83	5.84	5.85	5.86	5.87	5.88	5.89	5.90
2002	5.91	5.92	5.93	5.94	5.95	5.96	5.97	5.98	5.99	6.00	6.01	6.02	6.03
2003	6.04	6.05	6.06	6.07	6.08	6.09	6.10	6.11	6.12	6.13	6.14	6.15	6.16
2004	6.17	6.18	6.19	6.20	6.21	6.22	6.23	6.24	6.25	6.26	6.27	6.28	6.29
2005	6.30	6.31	6.32	6.33	6.34	6.35	6.36	6.37	6.38	6.39	6.40	6.41	6.42
2006	6.43	6.44	6.45	6.46	6.47	6.48	6.49	6.50	6.51	6.52	6.53	6.54	6.55
2007	6.56	6.57	6.58	6.59	6.60	6.61	6.62	6.63	6.64	6.65	6.66	6.67	6.68
2008	6.69	6.70	6.71	6.72	6.73	6.74	6.75	6.76	6.77	6.78	6.79	6.80	6.81
2009	6.82	6.83	6.84	6.85	6.86	6.87	6.88	6.89	6.90	6.91	6.92	6.93	6.94
2010	6.95	6.96	6.97	6.98	6.99	7.00	7.01	7.02	7.03	7.04	7.05	7.06	7.07
2011	7.08	7.09	7.10	7.11	7.12	7.13	7.14	7.15	7.16	7.17	7.18	7.19	7.20
2012	7.21	7.22	7.23	7.24	7.25	7.26	7.27	7.28	7.29	7.30	7.31	7.32	7.33
2013	7.34	7.35	7.36	7.37	7.38	7.39	7.40	7.41	7.42	7.43	7.44	7.45	7.46
2014	7.47	7.48	7.49	7.50	7.51	7.52	7.53	7.54	7.55	7.56	7.57	7.58	7.59
2015	7.60	7.61	7.62	7.63	7.64	7.65	7.66	7.67	7.68	7.69	7.70	7.71	7.72
2016	7.73	7.74	7.75	7.76	7.77	7.78	7.79	7.80	7.81	7.82	7.83	7.84	7.85
2017	7.86	7.87	7.88	7.89	7.90	7.91	7.92	7.93	7.94	7.95	7.96	7.97	7.98
2018	7.99	8.00	8.01	8.02	8.03	8.04	8.05	8.06	8.07	8.08	8.09	8.10	8.11
2019	8.12	8.13	8.14	8.15	8.16	8.17	8.18	8.19	8.20	8.21	8.22	8.23	8.24
2020	8.25	8.26	8.27	8.28	8.29	8.30	8.31	8.32	8.33	8.34	8.35	8.36	8.37
2021	8.38	8.39	8.40	8.41	8.42	8.43	8.44	8.45	8.46	8.47	8.48	8.49	8.50
2022	8.51	8.52	8.53	8.54	8.55	8.56	8.57	8.58	8.59	8.60	8.61	8.62	8.63
2023	8.64	8.65	8.66	8.67	8.68	8.69	8.70	8.71	8.72	8.73	8.74	8.75	8.76
2024	8.77	8.78	8.79	8.80	8.81	8.82	8.83	8.84	8.85	8.86	8.87	8.88	8.89
2025	8.90	8.91	8.92	8.93	8.94	8.95	8.96	8.97	8.98	8.99	9.00	9.01	9.02

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1847	7	1	0	0	0	10	164	172	32	6	0	0	4
1848	1	0	0	0	0	1	11	11	110	1	0	0	1
1849	0	0	0	0	0	1	124	79	48	76	43	6	409
1850	0	0	0	0	0	1	16	100	91	61	18	0	463
1851	4	0	0	0	0	1	14	124	100	91	18	0	463
1852	0	0	0	0	0	0	113	144	170	32	19	6	526
1853	0	0	0	0	0	0	17	124	138	139	27	12	658
1854	0	0	0	0	0	0	17	124	138	139	27	12	658
1855	0	0	0	0	0	0	14	94	244	327	15	0	635
1856	0	0	0	0	0	0	131	135	229	43	08	11	769
1857	0	0	0	0	0	0	134	220	270	138	21	1	904
1858	0	0	0	0	0	0	28	29	73	240	224	12	37
1859	0	0	0	0	0	0	28	29	73	240	224	12	37
1860	0	0	0	0	0	0	28	29	73	240	224	12	37
1861	0	0	0	0	0	0	28	29	73	240	224	12	37
1862	0	0	0	0	0	0	28	29	73	240	224	12	37
1863	0	0	0	0	0	0	28	29	73	240	224	12	37
1864	0	0	0	0	0	0	28	29	73	240	224	12	37
1865	0	0	0	0	0	0	28	29	73	240	224	12	37
1866	0	0	0	0	0	0	28	29	73	240	224	12	37
1867	0	0	0	0	0	0	28	29	73	240	224	12	37
1868	0	0	0	0	0	0	28	29	73	240	224	12	37
1869	0	0	0	0	0	0	28	29	73	240	224	12	37
1870	0	0	0	0	0	0	28	29	73	240	224	12	37
1871	0	0	0	0	0	0	28	29	73	240	224	12	37
1872	0	0	0	0	0	0	28	29	73	240	224	12	37
1873	0	0	0	0	0	0	28	29	73	240	224	12	37
1874	0	0	0	0	0	0	28	29	73	240	224	12	37
1875	0	0	0	0	0	0	28	29	73	240	224	12	37
1876	0	0	0	0	0	0	28	29	73	240	224	12	37
1877	0	0	0	0	0	0	28	29	73	240	224	12	37
1878	0	0	0	0	0	0	28	29	73	240	224	12	37
1879	0	0	0	0	0	0	28	29	73	240	224	12	37
1880	0	0	0	0	0	0	28	29	73	240	224	12	37
1881	0	0	0	0	0	0	28	29	73	240	224	12	37
1882	0	0	0	0	0	0	28	29	73	240	224	12	37
1883	0	0	0	0	0	0	28	29	73	240	224	12	37
1884	0	0	0	0	0	0	28	29	73	240	224	12	37
1885	0	0	0	0	0	0	28	29	73	240	224	12	37
1886	0	0	0	0	0	0	28						

## MEAN TEMPERATURE °F

[illegible]

## HEATING DEGREE DAYS

Season	Ind.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1907-8	0	0	0	1	39	0	276	349	368	210	161	52	0
1908-9	3	0	11	1	127	377	577	408	588	0	0	0	0
1909-10	0	0	0	0	333	333	333	333	333	184	190	62	0
1910-11	0	1	1	0	28	184	184	257	211	284	146	0	1704
1911-12	0	0	0	0	38	184	184	257	211	284	146	0	0
1912-13	0	0	0	0	38	184	358	417	258	371	226	0	102
1913-14	0	0	0	0	38	184	358	417	258	371	226	0	0
1914-15	0	0	0	0	38	184	358	417	258	371	226	0	0
1915-16	0	0	0	0	38	184	358	417	258	371	226	0	0
1916-17	0	0	0	0	38	184	358	417	258	371	226	0	0
1917-18	0	0	0	0	38	184	358	417	258	371	226	0	0
1918-19	0	0	0	0	38	184	358	417	258	371	226	0	0
1919-20	0	0	0	0	38	184	358	417	258	371	226	0	0
1920-21	0	0	0	0	38	184	358	417	258	371	226	0	0
1921-22	0	0	0	0	38	184	358	417	258	371	226	0	0
1922-23	0	0	0	0	38	184	358	417	258	371	226	0	0
1923-24	0	0	0	0	38	184	358	417	258	371	226	0	0
1924-25	0	0	0	0	38	184	358	417	258	371	226	0	0
1925-26	0	0	0	0	38	184	358	417	258	371	226	0	0
1926-27	0	0	0	0	38	184	358	417	258	371	226	0	0
1927-28	0	0	0	0	38	184	358	417	258	371	226	0	0
1928-29	0	0	0	0	38	184	358	417	258	371	226	0	0
1929-30	0	0	0	0	38	184	358	417	258	371	226	0	0
1930-31	0	0	0	0	38	184	358	417	258	371	226	0	0
1931-32	0	0	0	0	38	184	358	417	258	371	226	0	0
1932-33	0	0	0	0	38	184	358	417	258	371	226	0	0
1933-34	0	0	0	0	38	184	358	417	258	371	226	0	0
1934-35	0	0	0	0	38	184	358	417	258	371	226	0	0
1935-36	0	0	0	0	38	184	358	417	258	371	226	0	0
1936-37	0	0	0	0	38	184	358	417	258	371	226	0	0
1937-38	0	0	0	0	38	184	358	417	258	371	226	0	0
1938-39	0	0	0	0	38	184	358	417	258	371	226	0	0
1939-40	0	0	0	0	38	184	358	417	258	371	226	0	0
1940-41	0	0	0	0	38	184	358	417	258	371	226	0	0
1941-42	0	0	0	0	38	184	358	417	258	371	226	0	0
1942-43	0	0	0	0	38	184	358	417	258	371	226	0	0
1943-44	0	0	0	0	38	184	358	4					

ne Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93107		Miramar, California		32°52'N		117°08'W		477		KNKX			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF STATION LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	Navy	1949	1953	32°52'N	117°08'W	473	Mercurial					
2.	Moved to new office in operations building	"	1953	1957	"	"	463	"					
3.	Resurveyed	"	1957	1968	"	"	459	"	24				
4.	New barometer ML 512/GM	"	1968		"	"	459	"	24				
1a.	Weather service office	"			"	"	461	Aneroid	24				

SURFACE WIND EQUIPMENT INFORMATION						REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1a.	1949	Roof of tower	Aerovane	Double	47'	1. Barograph 2. Auto met station (AN/GMQ-29) 3. Ceiling light (ML-121) 4. Cloud height set (AN/GMQ-13D) 5. Transmissometer (AN/GMQ-10) 2 ea. 6. RVY Temperature SPEEDOMAX H-4
1.	1949	Atop hangar roof on 18' mast, 250' from weather office	Selsyn		50'	
2.	1953	New transmitter installed	"	"	50'	
3.	1953	Roof of operations tower	"	"	47'	
4.	1954	1000' north of operations building (installed)	"	"	18'	
5.	1957	1000' north of operations building	UMQ-5C	RD-108	22'	
6.	1960	2700' southwest of weather office	"	"	65'	
7.	1968	Top of control tower	UMQ-5C	RD-108		
8.	1970	2700 feet southwest of weather office	UMQ-5	RD-447/GMQ-29	20'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Moffett Field is situated at the southern end of San Francisco Bay. The bay terminates in marshes northeast of the field, and northwest the bay becomes a widening area of open water. The Santa Clara Valley extends to the southeast with the closest point of the Pacific Ocean approximately 25 miles to the west. The terrain around the field is such that it lies in a protected bowl. This bowl is formed by the ridges of the Santa Cruz Mountains in addition to the Sunol and Valpe ridges of the Diablo Mountains.

NAS Moffett Field enjoys a mediterranean or dry summer subtropical type climate. Winter rains account for approximately 80% of the annual precipitation during the months of November through March. An average of 7 to 10 days per month have precipitation during the winter. Severe winter storms with heavy rain and gale winds occur only occasionally. Thunderstorms, although very infrequent, may occur during any period of the year and are usually of light intensity.

The daily and annual temperature range is relatively small. Freezing temperatures may be expected occasionally during the winter months. Under the right synoptic conditions temperatures have been known to exceed 100 degrees F. during summer and early autumn; however, these temperatures are the exception rather

than the rule.

The summer weather is dominated by night and morning stratus (usually dissipating before noon) and the sea breeze emanating from the cold waters of the bay. Both influences combine to moderate daily temperatures. The average maximum ranges in the low 70's with minimums in the mid 50's. September, the month during which the sea breeze becomes less pronounced, is the warmest month of the year. September is also the month during which the all time record maximum of 105 degrees was observed.

During the winter months the worst flying conditions may be expected. Fog is the usual cause for below minimum conditions at the station. It's prevalence increases from a negligible value in September to a maximum of 3% of the time in December, then decreases to 0.3% by March. Relatively unfavorable flying conditions are also encountered during frontal passages.

Obstructions to vision consist largely of haze and smoke. This pollution is trapped below a strong inversion based between 1,000 to 2,000 feet persisting through most of the summer. Inversions close to the ground are not common during summer months, but become more frequent during the fall and winter months.

MOFFETT FIELD, CALIFORNIA







## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1964	1.04	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	12.80
1965	1.05	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	12.85
1966	1.06	1.08	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	12.90
1967	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	12.95
1968	1.08	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	13.00
1969	1.09	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	13.05
1970	1.10	1.12	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	13.10
1971	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	13.15
1972	1.12	1.14	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	13.20
1973	1.13	1.15	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	13.25
1974	1.14	1.16	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	13.30
1975	1.15	1.17	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	13.35
1976	1.16	1.18	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	13.40
1977	1.17	1.19	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	13.45
1978	1.18	1.20	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	13.50
1979	1.19	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	13.55
1980	1.20	1.22	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	13.60
1981	1.21	1.23	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	13.65
1982	1.22	1.24	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	13.70
1983	1.23	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	13.75
1984	1.24	1.26	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	13.80
1985	1.25	1.27	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	13.85
1986	1.26	1.28	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	13.90
1987	1.27	1.29	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	13.95
1988	1.28	1.30	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	14.00
1989	1.29	1.31	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	14.05
1990	1.30	1.32	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	14.10
1991	1.31	1.33	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	14.15
1992	1.32	1.34	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	14.20
1993	1.33	1.35	1.36	1.37	1.38	1.39	1.40	1.41	1.42	1.43	1.44	1.45	14.25

## COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec.	Total
1948													
1949													
1950													
1951													
1952													
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## MEAN TEMPERATURE °F

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1845	W.	W.	32.1	35.8	37.1	33.0	38.5	40.2	38.0	33.8	32.8	32.0	W.
1846	37.4	37.4	36.7	35.4	36.1	35.0	38.5	40.2	38.0	33.8	32.8	32.0	36.4
1847	33.7	31.8	34.7	36.8	41.0	38.1	44.0	43.7	43.1	40.9	30.5	37.1	37.8
1848	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1	36.1
1849	31.2	48.2	37.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2	36.2
1850	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4	36.4
1851	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1852	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1853	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1854	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1855	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1856	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1857	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1858	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1859	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1860	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1861	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1862	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1863	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1864	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1865	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1866	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1867	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1868	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1869	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1870	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1871	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1872	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1873	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1874	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8
1875	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8	36.8

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1844-45	6	41	32	131	338	438	566	489	273	219	76	76	2,710
45-46	25	40	54	175	408	512	633	282	314	197	112	28	2,910
46-47	21	14	43	170	430	548	420	461	438	335	254	72	3,332
47-48	44	34	170	240	511	511	735	505	688	259	166	63	3,375
48-49	60	"	46	202	242	572	633	452	421	245	202	122	"
49-50	111	111	111	111	288	346	537	457	378	327	181	137	3,826
50-51	15	42	20	118	169	461	376	366	424	500	325	320	2,826
51-52	31	30	20	149	772	430	446	336	426	180	155	48	2,596
52-53	28	46	102	193	910	539	609	457	378	405	164	134	3,413
53-54	88	23	99	174	334	389	465	506	422	324	185	127	3,224
54-55	100	100	100	100	312	408	399	235	240	136	136	72	2,316
55-56	25	42	30	180	332	409	339	379	260	181	77	23	2,339
56-57	21	0	19	84	304	344	399	339	260	181	77	23	2,339
57-58	17	38	28	76	275	433	484	362	321	161	167	51	3,479
58-59	46	45	64	148	327	470	521	315	564	250	252	64	2,915
59-60	41	21	61	135	322	529	499	464	421	220	208	105	2,960
60-61	42	21	61	135	322	529	499	464	421	220	208	105	2,960
61-62	42	21	61	135	322	529	499	464	421	220	208	105	2,960
62-63	42	21	61	135	322	529	499	464	421	220	208	105	2,960
63-64	42	21	61	135	322	529	499	464	421	220	208	105	2,960
64-65	42	21	61	135	322	529	499	464	421	220	208	105	2,960
65-66	42	21	61	135	322	529	499	464	421	220	208	105	2,960
66-67	42	21	61	135	322	529	499	464	421	220	208	105	2,960
67-68	42	21	61	135	322	529	499	464	421	220	208	105	2,960
68-69	42	21	61	135	322	529	499	464	421	220	208	105	2,960
69-70	42	21	61	135	322	529	499	464	421	220	208	105	2,960
70-71	42	21	61	135	322	529	499	464	421	220	208	105	2,960
71-72	42	21	61	135	322	529	499	464	421	220	208	105	2,960
72-73	42	21	61	135	322	529	499	464	421	220	208	105	2,960
73-74	42	21	61	135	322	529	499	464	421	220	208	105	2,960
74-75	42	21	61	135	322	529	499	464	421	220	208	105	2,960
75-76	42	21	61	135	322	529	499	464	421	220	208	105	2,960
76-77	42	21	61	135	322	529	499	464	421	220	208	105	2,960
77-78	42	21	61	135	322	529	499	464	42				

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

MOFFETT FIELD, CALIFORNIA



STATION NO. OR SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT.)	CALL SIGN	WMO NUMBER
23244	Moffett Field, California	37°25'N	122°03'W	26	KNDQ	74509

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather service office	Navy	1945	1954	37°25'N	122°03'W	25.4	Fortin	24
2.	"	"	1954		"	"	38.5	"	24
1a.	"	"	1968		"	"	40.5	Aneroid	24

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND
1.	Installed 1945	On mast located 70' WNW of control tower	3 cup		60'
2.	1955	Atop control tower	UNQ-5C	RD-108B	71'
3.	1961	1600' SE of operations building, 295' west of runway 32L taxiway	"	"	13'

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station New Orleans is approximately 15 miles south of the city of New Orleans. The terrain over the entire area is largely marshy delta land cut by numerous bayous, canals, and drainage ditches. The station is virtually surrounded by water.

The climate of the area in a large part is influenced by the close proximity of the many water surfaces. Throughout the year, these waters modify the relative humidity and temperature conditions, decreasing the range between extremes.

During the summer season prevailing winds carry inland warm moist air favorable for sporadic, often localized, thunderstorms. These thunderstorms are the main source of precipitation during the summer months.

NAS New Orleans is in the hurricane belt. The area is frequently influenced by tropical storms and hurricanes from June through November each year.

During the winter season, the area is subjected alternately to tropical air and cold continental air. From December to May, the

numerous water areas are usually colder than the air temperature, favoring the formation of fogs over them, particularly with weak southerly winds.

The occurrence of fog and/or low stratus clouds significantly affects aviation operations from December through March, with the greatest frequency in February. Visibility, at times, is reduced by smoke from the industrial plants along the river. Smoke, during the fall and winter also occurs when marshland areas are burned.

A fairly definite rainy period exists during the winter season. Measurable precipitation occurs on about one third of the days. Violent thunderstorms move through the area, in connection with cold fronts and squall lines, during the winter season. These frontal storms occasionally produce severe thunderstorms and tornado activity. Waterspouts are occasionally observed during these periods. The pattern of spring rains is similar to those of winter, while fall rains tend to be distributed in much the same manner as the summer showers. July, August, and September have the highest mean precipitation.

NEW ORLEANS, LOUISIANA







## MEAN TEMPERATURE °F

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	47.7	42.6	48.5	48.5	74.4	80.0	80.6	80.2	78.5	82.5	82.4	81.8	80.7
1909	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1910	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1911	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1912	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1913	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1914	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1915	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1916	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1917	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1918	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1919	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1920	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1921	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1922	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1923	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1924	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1925	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1926	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1927	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1928	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1929	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1930	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1931	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1932	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1933	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1934	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1935	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1936	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1937	47.7	42.6	48.4	48.4	74.3	80.0	80.4	80.6	78.5	82.5	82.4	81.8	80.7
1938	47.7	42.6											

## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1925	9.02	7.9	8.65	7.1	5.18	4.48	12.15	4.00	7.15	1.79	.82	1.82	56.23
1926	10.00	8.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1927	10.89	9.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1928	10.89	9.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1929	10.89	9.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1930	10.89	9.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1931	10.89	9.25	7.25	6.15	4.67	4.07	11.37	8.20	1.77	1.07	1.48	2.42	11.41
1932	4.25	1.67	1.67	1.18	1.18	3.15	3.15	1.45	1.45	1.45	2.34	1.45	36.73
1933	3.84	2.7	2.40	1.8	1.8	3.78	3.31	3.66	7.21	.01	9.88	1.88	31.87
1934	1.84	4.47	4.47	1.54	1.54	3.75	5.87	5.65	5.45	2.54	1.80	1.89	22.29
1935	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1936	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1937	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1938	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1939	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1940	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1941	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1942	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1943	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1944	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1945	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1946	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1947	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1948	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1949	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1950	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1951	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1952	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1953	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29
1954	1.46	4.20	4.20	1.52	1.52	3.42	4.70	4.70	2.20	2.59	2.59	2.59	22.29

## HEATING DEGREE DAYS

Summer	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
7-59	0	0	0	0	26	137	404	488	241	204	37	0	1573
8-59	0	0	0	15	237	312	365	360	241	113	17	0	1600
9-59	0	0	0	0	13	104	259	340	241	113	0	0	1459
1-62	0	0	0	0	0	0	299	407	135	249	70	0	1649
2-63	0	0	0	0	14	132	398	507	446	113	1	0	1684
3-64	0	0	0	15	160	287	487	431	236	218	1	0	1824
4-65	0	0	0	0	31	163	323	351	335	175	2	0	1629
5-66	0	0	0	0	26	136	340	350	311	101	1	0	1649
6-67	0	0	0	0	0	17	245	372	374	304	22	0	1770
7-68	0	0	18	61	360	432	370	367	364	16	9	0	1970
8-69	0	0	0	22	217	310	566	347	165	14	9	0	1950
9-70	0	0	0	0	0	0	488	252	252	110	26	0	1667
1-72	0	0	0	8	187	498	229	252	110	26	0	0	1667
2-73	0	0	0	0	16	238	266	394	357	74	87	1	1607
3-74	0	0	0	23	85	407	107	279	46	40	0	0	1010
4-75	0	0	0	0	2	131	232	484	186	177	67	0	1369
5-77	0	0	0	0	0	0	211	226	226	177	67	0	1369
6-77	0	0	0	0	0	0	488	349	404	332	20	0	1695
7-78	0	0	0	0	49	110	351		332	125	20	0	1695
8-79	0	0	0	1	34	165	339	409	321	179	39	2	1806

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1885	0	1	15	165	351	429	480	470	642	143	71	3	1851
1886	0	30	104	310	433	440	430	510	437	228	43	0	2073
1887	17	32	123	239	499	626	615	437	637	228	43	0	2996
1888	17	32	123	239	499	626	615	437	637	228	43	0	2996
1889	17	32	123	239	499	626	615	437	637	228	43	0	2996
1890	17	32	123	239	499	626	615	437	637	228	43	0	2996
1891	17	32	123	239	499	626	615	437	637	228	43	0	2996
1892	17	32	123	239	499	626	615	437	637	228	43	0	2996
1893	17	32	123	239	499	626	615	437	637	228	43	0	2996
1894	17	32	123	239	499	626	615	437	637	228	43	0	2996
1895	17	32	123	239	499	626	615	437	637	228	43	0	2996
1896	17	32	123	239	499	626	615	437	637	228	43	0	2996
1897	17	32	123	239	499	626	615	437	637	228	43	0	2996
1898	17	32	123	239	499	626	615	437	637	228	43	0	2996
1899	17	32	123	239	499	626	615	437	637	228	43	0	2996
1900	17	32	123	239	499	626	615	437	637	228	43	0	2996
1901	17	32	123	239	499	626	615	437	637	228	43	0	2996
1902	17	32	123	239	499	626	615	437	637	228	43	0	2996
1903	17	32	123	239	499	626	615	437	637	228	43	0	2996
1904	17	32	123	239	499	626	615	437	637	228	43	0	2996
1905	17	32	123	239	499	626	615	437	637	228	43	0	2996
1906	17	32	123	239	499	626	615	437	637	228	43	0	2996
1907	17	32	123	239	499	626	615	437	637	228	43	0	2996
1908	17	32	123	239	499	626	615	437	637	228	43	0	2996
1909	17	32	123	239	499	626	615	437	637	228	43	0	2996
1910	17	32	123	239	499	626	615	437	637	228	43	0	2996
1911	17	32	123	239	499	626	615	437	637	228	43	0	2996
1912	17	32	123	239	499	626	615	437	637	228	43	0	2996
1913	17	32	123	239	499	626	615	437	637	228	43	0	2996
1914	17	32	123	239	499	626	615	437	637	228	43	0	2996
1915	17	32	123	239	499	626	615	437	637	228	43	0	2996
1916	17	32	123	239	499	626	615	437	637	228	43	0	2996
1917	17	32	123	239	499	626	615	437	637	228	43	0	2996
1918	17	32	123	239	499	626	615	437	637	228	43	0	2996
1919	17	32	123	239	499	626	615	437	637	2			

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. ON SUMMARY:		STATION NAME:		LATITUDE:		LONGITUDE:		STATION ELEV. (FT.):		CALL SIGN:		WIND NUMBER:	
12958		New Orleans, Louisiana		29°50'N		90°01'W		2		KNBG			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS. PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, bldg 208	Navy	1950	1957	30°02'N	90°05'W	13	Mercurial	24				
2.	" " " "	"	1958	1961	29°50'N	90°01'W	5	"	24				
3.	" " " bldg 1	"	1961	1970	29°49'N	"	5	"	24				
4.	Removed	"	1970										
1a.	Weather service office, bldg 1	"	1960		29°50'N	"	6	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Unknown	Atop operation control tower	Selsyn	Triple	87'	1. Marine barograph (AN/GMQ-29A)
2.	Installed 1958	625' northwest of the operations building	AN/GMQ-5	RD-108B	Unknown	2. Auto met. station (AN/GMQ-29A) 3. Ceiling light (ML-121) 4. Cloud height set (AN/GMQ-13D) 5. Transmissometer (AN/GMQ-10C)
3.	1960	500' southeast of runway 04-22	"	"	14'	6. Radar (AN/FFS-81) 7. Theodolite 8. Recorder, weather data (RO-379/GMH)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station New River is located in the coastal plains area of North Carolina, on the Morgan Bay sector of the New River. The air station is located approximately 14 miles inland from the Atlantic Ocean. The only area of general dry land lies in the northern sector, with the city of Jacksonville being approximately 3 miles to the north and across the New River.

New River has a warm, pleasant climate with hot summers.

Flying conditions are very good with Visual Flight Rules (VFR) existing 91% of the time. The best month, July, averaging 95% and the worst month, January, 85%.

New River experiences all four seasons, the usual mid-latitude seasonal weather phenomena are all observed to some extent.

Precipitation tends to have two general occurrence peaks, one in January and February. Winter precipitation tends to be rain, rain-showers, drizzle and occasionally snow. In June, July, and August when the Bermuda high has pushed westward over the area bringing warm, humid maritime tropical air, the second peak occurs. Thunderstorms and rainshowers, of the air mass type, account for this peak. The driest periods occur in April and November.

Temperatures are generally mild during the spring. Temperatures

average near 65 degrees F., summer temperatures average near 80 degrees F., with autumn near 67 degrees F., and winter close to 48 degrees F.

The prevailing wind direction is from the north with a mean speed of 6 knots. The maximum peak gust recorded was 70 knots from the north in September 1958 associated with a hurricane that passed to the east of New River. Numerous hurricanes pass to the east of the station but few pass over the station, most of the gustiness in excess of 50 knots at this station has been associated with thunderstorms. Thunderstorms are always a threat with a possibility of tornadoes. The station has never experienced a tornado, but water-spouts have been reported by pilots over the ocean and some tornadoes have been reported as close as 30 miles west of the station. Local thunderstorms have a tendency to follow the New River or occur over the pocosin around the station passing to the east or west of the field.

Land and sea breezes have an effect on this station, although the area is 14 miles inland, the abundant source of water in the area allows the sea breeze to remain generally unabated as it moves in from over the ocean. The effects of the sea breeze extend above 3000 feet. The land breeze at night tends to produce small pockets of shallow fog over the pocosin at low tide, at times these pockets will drift over the field.

**NEW RIVER, NORTH CAROLINA**



STN LTRS: KNCA  
WBAN # : 93727  
WMO # :

FLYING WEA	%	HMS	1ST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING			01	31	26	23	19	21	18	16	15	19	20	15	25	21	14
LESS 4000			04	31	26	27	24	28	20	20	17	23	25	18	24	24	14
FT ANO/DR			07	34	32	30	21	29	27	31	24	31	27	25	31	28	22
VISIBILITY			10	31	28	29	21	32	38	24	36	36	34	20	26	30	22
LESS 5 MI			13	31	30	32	28	30	49	52	51	49	34	23	26	37	22
			16	30	28	29	25	38	36	38	37	33	27	18	26	30	22
			19	29	27	27	17	21	22	22	18	22	20	16	24	22	21
			22	29	27	22	16	24	18	17	18	18	20	16	27	21	19
ALL HMS			31	29	29	28	22	29	30	29	29	30	26	19	26	27	19
CEILING			01	12	11	10	6	7	3	2	3	5	7	4	11	7	14
LESS 1000			04	14	11	11	8	12	6	6	3	9	10	6	10	9	14
FT ANO/DR			07	16	14	15	9	14	13	8	10	16	15	10	12	13	22
VISIBILITY			10	15	13	12	5	3	3	2	4	4	5	5	7	5	22
LESS 3 MI			13	12	10	8	3	3	3	2	3	4	5	5	7	5	22
			16	11	11	7	3	4	3	2	4	4	5	4	7	6	21
			19	12	11	9	4	5	3	2	3	4	5	4	6	6	21
			22	11	10	10	4	6	2	2	2	3	4	4	10	6	19
ALL HMS			13	11	11	10	5	7	5	3	4	7	4	6	9	7	19
CEILING			01	3	3	4	1	1	0	0	1	1	2	2	4	2	14
LESS 400			04	4	4	5	2	4	2	2	2	7	3	3	4	3	14
FT ANO/DR			07	5	3	2	1	0	0	0	0	7	3	3	5	4	22
VISIBILITY			10	3	3	2	1	0	0	0	0	7	3	3	2	1	22
LESS 1 MI			13	1	3	1	0	0	1	0	0	7	3	3	1	1	22
			16	1	3	1	0	0	1	0	0	7	3	3	1	1	22
			19	2	3	2	0	0	1	0	1	7	3	3	2	1	22
ALL HMS			3	3	3	2	1	1	1	0	1	2	3	2	2	2	14
CEILING			01	2	1	3	1	1	0	0	0	1	1	1	2	1	14
LESS 300			04	3	2	4	2	3	2	1	2	5	3	2	3	3	14
FT ANO/DR			07	3	3	3	0	3	3	1	2						



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1935													
1936													
1937													
1938													
1939							14.34						
1940													
1941													
1942													
1943													
1944													
1945													
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1994													
1995													
MEAN	3.76	3.99	3.31	2.93	3.15	3.94	8.08	6.46	4.31	3.17	2.61	3.51	32.92

**COOLING DEGREE DAYS**

[illegible]

## MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1955	41.6	48.8	37.9	62.1 <sup>2</sup>	74.1 <sup>2</sup>	73.3 <sup>2</sup>	83.5 <sup>2</sup>	81.5 <sup>2</sup>	74.8 <sup>2</sup>	67.5 <sup>2</sup>	55.3	46.2 <sup>2</sup>	H
1956	42.8	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1957	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1958	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1959	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1960	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1961	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1962	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1963	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1964	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1965	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1966	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1967	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1968	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1969	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1970	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1971	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1972	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
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1974	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1975	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1976	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
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1980	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1981	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1982	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1983	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1984	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1985	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1986	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1987	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1988	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
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1990	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1991	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1992	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1993	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1994	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1995	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1996	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1997	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1998	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
1999	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2000	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2001	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2002	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2003	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2004	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2005	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2006	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2007	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2008	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2009	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2010	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2011	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2012	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2013	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2014	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2015	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2016	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2017	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2018	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2019	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2020	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2021	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2022	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2023	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2024	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2025	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2026	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2027	42.6	48.1	45.3	53.8	71.3 <sup>2</sup>	78.5 <sup>2</sup>	85.5 <sup>2</sup>	81.8 <sup>2</sup>	73.5 <sup>2</sup>	63.6 <sup>2</sup>	33.2	26.9 <sup>2</sup>	H
2028	42.6	48											

## HEATING DEGREE DAYS

Station	Jul	Aug	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1-55	F	1	H	H	320	H	717	H	360	H	H	H	281
2-56	F	1	H	H	320	H	717	H	314	139	H	H	281
3-57	F	1	H	H	320	H	717	H	314	139	H	H	281
4-58	F	1	H	H	320	H	717	H	314	139	H	H	281
5-59	F	1	H	H	320	H	717	H	314	139	H	H	281
6-60	F	1	H	H	320	H	717	H	314	139	H	H	281
7-61	F	1	H	H	320	H	717	H	314	139	H	H	281
8-62	F	1	H	H	320	H	717	H	314	139	H	H	281
9-63	F	1	H	H	320	H	717	H	314	139	H	H	281
10-64	F	1	H	H	320	H	717	H	314	139	H	H	281
11-65	F	1	H	H	320	H	717	H	314	139	H	H	281
12-66	F	1	H	H	320	H	717	H	314	139	H	H	281
13-67	F	1	H	H	320	H	717	H	314	139	H	H	281
14-68	F	1	H	H	320	H	717	H	314	139	H	H	281
15-69	F	1	H	H	320	H	717	H	314	139	H	H	281
16-70	F	1	H	H	320	H	717	H	314	139	H	H	281
17-71	F	1	H	H	320	H	717	H	314	139	H	H	281
18-72	F	1	H	H	320	H	717	H	314	139	H	H	281
19-73	F	1	H	H	320	H	717	H	314	139	H	H	281
20-74	F	1	H	H	320	H	717	H	314	139	H	H	281
21-75	F	1	H	H	320	H	717	H	314	139	H	H	281
22-76	F	1	H	H	320	H	717	H	314	139	H	H	281
23-77	F	1	H	H	320	H	717	H	314	139	H	H	281
24-78	F	1	H	H	320	H	717	H	314	139	H	H	281
25-79	F	1	H	H	320	H	717	H	314	139	H	H	281
26-80	F	1	H	H	320	H	717	H	314	139	H	H	281
27-81	F	1	H	H	320	H	717	H	314	139	H	H	281
28-82	F	1	H	H	320	H	717	H	314	139	H	H	281
29-83	F	1	H	H	320	H	717	H	314	139	H	H	281
30-84	F	1	H	H	320	H	717	H	314	139	H	H	281
31-85	F	1	H	H	320	H	717	H	314	139	H	H	281
32-86	F	1	H	H	320	H	717	H	314	139	H	H	281
33-87	F	1	H	H	320	H	717	H	314	139	H	H	281
34-88	F	1	H	H	320	H	717	H	314	139	H	H	281
35-89	F	1	H	H	320	H	717	H	314	139	H	H	281
36-90	F	1	H	H	320	H	717	H	314	139	H	H	281
37-91	F	1	H	H	320	H	717	H	314	139	H	H	281
38-92	F	1	H	H	320	H	717	H	314	139	H	H	281
39-93	F	1	H	H	320	H	717	H	314	139	H	H	281
40-94	F	1	H	H	320	H	717	H	314	139	H	H	281
41-95	F	1	H	H	320	H	717	H	314	139	H	H	281
42-96	F	1	H	H	320	H	717	H	314	139	H	H	281

The Degrees Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
93727		New River, North Carolina		34°42'N		77°26'W		24		KNCA			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	MCAF	1953	1956	34°42'N	77°26'W	24	Mercurial	24				
2.	" " "	"	1956	1969	"	"	27	"	24				
3.	South wall of lab.	MCAS	1969	1970	"	"	18	"	24				
4.	North wall of lab.	"	1970		"	"	18		24				
1a.	Weather service office	MCAF	1954	1969	"	"	19	Aneroid	24				
2a.	GMQ-14 console	MCAS	1969	1977	"	"	19	"	24				
3a.	Weather service office	"	1977		"	"	19		24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1956	Installed roof of ops bldg	UMQ-5A	ID-300/A	Unk	1. Barograph (ML-3)
2.	Unk	Modified " " "	UMQ-5C	ID-300	45'	2. Cloud height set (AN/GMQ-13)
3.	1966	Post 2 feet E of ops bldg	AN/UMQ-5C	"	50'	3. Theodolite (ML-247)
4.	1967	15' mast 1600' WNW of ops bldg	"	"	39'	4. Transmissometer (AN/GMQ-10C)
5.	1967	" " "	"	RD-108B	39'	5. Auto met sta (GMQ-29A)
6.	1968	15' mast 1450' from bldg 848	"	RD-108B	39'	6. Radar recorder FAX (GMH-6(V))

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Fleet Weather Central Norfolk, situated on the Naval Air Station, is located adjacent to the northwest side of the city of Norfolk, Virginia. The Naval Air Station is on a promontory extending into the lower Chesapeake Bay.

Hampton Roads, one of the best natural harbors in the world, is immediately adjacent to the naval complex containing the Naval Air Station. The topography of the region is low and flat; the mean elevation is near 15 feet. Southwest of Hampton Roads lies the Dismal Swamp which extends into North Carolina. To the west of Hampton Roads, the terrain slopes upward slightly for 150 miles. The Chesapeake Bay stretches northward some 160 miles from the Norfolk area through eastern Virginia and Maryland. The nearest predominant orographic barrier is the Appalachian Mountains stretching northeast-southwest in West Central Virginia.

The proximity to the water tends to moderate the climate. To some extent neither the heat of the summer nor the cold

of winter are as intense as inland areas of the same latitude.

During the summer season the prominence of the Bermuda high makes the predominate wind in the area, southerly, bringing into the area warm moist air. The average summer temperatures vary from highs in the mid 80's and lows in the low 70's with humidities averaging 75%. Temperatures of 100 degrees F. or higher are very infrequent in the area. A record maximum temperature of 101 degrees F. was recorded in June of 1952. The maximum precipitation occurs in the months of July, August, and September primarily from thunderstorms.

Norfolk's geographic position with respect to the principal storm tracks is especially favorable, being south of the average path of storms originating in the higher latitudes and north of the usual track of hurricane and tropical storms. Over the years from 1900 to 1977 tropical storms have been most prevalent in the month of September. During the 77 year span only 16 hurricanes have passed within 60 miles of Norfolk.

NORFOLK, VIRGINIA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: HURFOLK, VIRGINIA  
LOCATION : N36 57 476 17

PERIOD: JAN 46-DEC 77  
ELEV : 15

STN LTMS: KNGU  
MEAN # : 13750  
AMO # :

TEMPERATURE DEC F		PRECIPITATION INCHES		SNOWFALL RELATIVE		S DEM PRESS SFC WINDS		MEAN PRECIP		H S		MEAN		SNOWFALL		MT Y MAX		MIN	
MEAN		HOURS		MAX		IN PT ALT PVLG		AMT INCHES		T		T		IN		OM FUG DEG F		AND	
DAILY		MEAN		MAX		HOURS		HOURS		HOURS		HOURS		HOURS		HOURS		HOURS	
JAN 49		34		42		7		2.0		4.0		4.0		4.0		4.0		4.0	
FEB 51		35		43		12		3.1		5.4		5.4		5.4		5.4		5.4	
MAR 57		41		50		27		3.1		5.5		5.5		5.5		5.5		5.5	
APR 68		50		59		29		2.5		7.4		7.4		7.4		7.4		7.4	
MAY 76		59		68		37		3.2		7.4		7.4		7.4		7.4		7.4	
JUN 83		68		76		101		4.7		9.6		9.6		9.6		9.6		9.6	
JUL 87		72		80		100		4.7		12.2		12.2		12.2		12.2		12.2	
AUG 85		72		79		100		5.3		10.9		10.9		10.9		10.9		10.9	
SEP 80		67		74		100		3.7		10.3		10.3		10.3		10.3		10.3	
OCT 70		57		63		93		3.3		9.5		9.5		9.5		9.5		9.5	
NOV 60		46		53		94		2.7		6.3		6.3		6.3		6.3		6.3	
DEC 52		37		45		78		14		2.9		2.9		2.9		2.9		2.9	
ANN 58		53		61		101		17		38.9		17.2		17.2		17.2		17.2	
EVR 32		52		32		32		32		32		32		32		32		32	

REMARKS: \*DATA NOT AVAILABLE. # LESS THAN 0.5 DAY, 20.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE.  
THE VALUE LISTED UNDER PRESS ALT FEET 99.95% INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME.  
EVR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, POP).

FLYING NEA & HRS		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		OCT		NOV		DEC		ANN		EVR	
CEILING		01	28	27	27	25	21	21	24	18	13	18	9	6	6	6	9	19	24	24	20	13	11	32	32	21	32	32	
LESS 5000		04	29	27	26	22	22	26	26	21	16	21	11	8	9	13	12	23	27	27	23	10	13	32	32	21	23	32	
FT AND/OR		07	31	29	27	25	24	27	27	23	21	23	14	4	10	10	14	27	29	29	25	17	15	32	32	23	26	32	
VISIBILITY		10	31	27	27	25	30	28	25	22	21	24	7	5	5	5	9	27	27	27	23	20	12	32	32	25	25	32	
LESS 5 MI		13	27	26	27	25	29	25	25	23	21	22	8	6	5	5	9	25	26	26	23	22	10	32	32	25	26	32	
ALL HRS		16	26	28	27	25	29	25	21	19	15	16	7	6	5	5	9	20	25	25	22	20	8	32	32	22	25	32	
		19	27	25	21	21	25	21	21	19	15	16	8	6	5	5	9	17	26	26	22	20	9	32	32	23	32	32	
		22	27	25	23	23	27	23	23	21	14	15	9	7	7	7	15	25	25	25	22	21	12	32	32	21	32	32	
		28	28	27	27	27	27	23	25	21	18	20	21	7	7	5	22	23	27	27	22	22	12	32	32	24	32	32	
ALL HRS		16	28	27	27	27	27	23	25	21	18	20	21	7	7	5	22	23	27	27	22	22	12	32	32	24	32	32	
CEILING		01	17	15	14	14	14	10	14	9	6	9	9	6	6	6	9	9	13	13	10	10	13	32	32	11	32	32	
LESS 1500		04	17	15	18	18	14	12	16	11	8	14	11	11	11	13	12	12	16	16	12	13	13	32	32	14	32	32	
FT AND/OR		07	19	18	17	17	14	12	14	10	8	14	7	4	4	5	10	14	17	17	13	12	15	32	32	14	32	32	
VISIBILITY		10	18	17	17	15	13	12	14	10	4	10	7	5	5	5	9	12	14	14	12	12	10	32	32	14	32	32	
LESS 3 MI		13	16	14	14	13	13	8	10	7	5	7	8	6	6	5	9	9	12	12	10	10	12	32	32	12	32	32	
		16	13	14	12	12	12	6	10	7	5	8	7	6	5	5	9	9	12	12	8	8	10	32	32	12	32	32	
		19	14	15	12	12	12	9	10	8	6	8	7	6	5	5	9	9	12	12	8	8	10	32	32	11	32	32	
		22	15	15	12	12	12	10	11	8	6	8	7	6	5	5	9	9	12	12	8	8	10	32	32	11	32	32	
		15	15	15	14	14	14	10	13	9	7	9	9	7	7	7	10	10	14	14	10	10	12	32	32	12	32	32	
ALL HRS		16	16	15	14	14	14	10	13	9	7	9	9	7	7	7	10	10	14	14	10	10	12	32	32	12	32	32	
CEILING		01	7	8	5	5	5	5	5	2	0	2	2	0	0	0	0	1	4	4	4	4	4	32	32	4	32	32	
LESS 500		04	8	7	7	7	7	5	6	2	2	2	2	2	2	2	2	3	5	5	5	5	5	32	32	5	32	32	
FT AND/OR		07	7	9	7	7	6	5	5	2	1	1	1	0	0	0	0	3	6	6	6	6	6	32	32	5	32	32	
VISIBILITY		10	7	7	6	5	4	4	4	1	0	1	1	0	0	0	0	1	1	1	1	1	1	32	32	2	32	32	
LESS 1 MI		13	5	5	4	4	4	2	2	1	0	1	1	0	0	0	0	1	2	2	2	2	2	32	32	2	32	32	
		16	4	6	4	4	4	2	2	1	0	1	1	0	0	0	0	2	2	2	2	2	2	32	32	2	32	32	
		19	5	6	6	6	6	3	3	1	0	1	1	0	0	0	0	2	2	2	2	2	2	32	32	3	32	32	
		22	6	6	6	6	6	3	4	1	0	1	1	0	0	0	0	1	3	3	3	3	3	32	32	3	32	32	
ALL HRS		6	6	7	6	6	6	3	4	1	1	1	1	1	1	1	1	1	3	3	3	3	3	32	32	3	32	32	
CEILING		01	2	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	1	32	32	
LESS 100		04	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	1	32	32	
FT AND/OR		07	2	3	3	3	2	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	1	32	32	1	32	32	
VISIBILITY		10	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	0	32	32	
LESS 1/2 MI		13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32	0	32	32	
		16	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	0	32	32	
		19	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	0	32	32	
		22	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	1	32	32	
ALL HRS		27	1	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	1	1	1	1	1	32	32	1	32	32	



MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	12.6	14.6	16.4	18.2	19.8	21.5	23.2	24.9	26.6	28.3	29.9	31.6	24.8
1945	13.1	15.1	16.9	18.7	20.4	22.1	23.8	25.5	27.2	28.9	30.6	32.3	25.3
1946	13.6	15.6	17.4	19.2	20.9	22.6	24.3	26.0	27.7	29.4	31.1	32.8	26.1
1947	14.1	16.1	17.9	19.7	21.4	23.1	24.8	26.5	28.2	29.9	31.6	33.3	26.9
1948	14.6	16.6	18.4	20.2	21.9	23.6	25.3	27.0	28.7	30.4	32.1	33.8	27.7
1949	15.1	17.1	18.9	20.7	22.4	24.1	25.8	27.5	29.2	30.9	32.6	34.3	28.5
1950	15.6	17.6	19.4	21.2	22.9	24.6	26.3	28.0	29.7	31.4	33.1	34.8	29.3
1951	16.1	18.1	20.0	21.7	23.4	25.1	26.8	28.5	30.2	31.9	33.6	35.3	30.1
1952	16.6	18.6	20.5	22.2	23.9	25.6	27.3	29.0	30.7	32.4	34.1	35.8	30.9
1953	17.1	19.1	21.0	22.7	24.4	26.1	27.8	29.5	31.2	32.9	34.6	36.3	31.7
1954	17.6	19.6	21.5	23.2	24.9	26.6	28.3	30.0	31.7	33.4	35.1	36.8	32.5
1955	18.1	20.1	22.0	23.7	25.4	27.1	28.8	30.5	32.2	33.9	35.6	37.3	33.3
1956	18.6	20.6	22.5	24.2	25.9	27.6	29.3	31.0	32.7	34.4	36.1	37.8	34.1
1957	19.1	21.1	23.0	24.7	26.4	28.1	29.8	31.5	33.2	34.9	36.6	38.3	34.9
1958	19.6	21.6	23.5	25.2	26.9	28.6	30.3	32.0	33.7	35.4	37.1	38.8	35.7
1959	20.1	22.1	24.0	25.7	27.4	29.1	30.8	32.5	34.2	35.9	37.6	39.3	36.5
1960	20.6	22.6	24.5	26.2	27.9	29.6	31.3	33.0	34.7	36.4	38.1	39.8	37.3
1961	21.1	23.1	25.0	26.7	28.4	30.1	31.8	33.5	35.2	36.9	38.6	40.3	38.1
1962	21.6	23.6	25.5	27.2	28.9	30.6	32.3	34.0	35.7	37.4	39.1	40.8	38.9
1963	22.1	24.1	26.0	27.7	29.4	31.1	32.8	34.5	36.2	37.9	39.6	41.3	39.7
1964	22.6	24.6	26.5	28.2	30.0	31.7	33.4	35.1	36.8	38.5	40.2	41.8	40.5
1965	23.1	25.1	27.0	28.7	30.4	32.1	33.8	35.5	37.2	38.9	40.6	42.3	41.3
1966	23.6	25.6	27.5	29.2	31.0	32.7	34.4	36.1	37.8	39.5	41.2	42.8	42.1
1967	24.1	26.1	28.0	29.7	31.4	33.1	34.8	36.5	38.2	39.9	41.6	43.3	42.9
1968	24.6	26.6	28.5	30.2	31.9	33.6	35.3	37.0	38.7	40.4	42.1	43.8	43.7
1969	25.1	27.1	29.0	30.7	32.4	34.1	35.8	37.5	39.2	40.9	42.6	44.3	44.5
1970	25.6	27.6	29.5	31.2	32.9	34.6	36.3	38.0	39.7	41.4	43.1	44.8	45.3
1971	26.1	28.1	30.0	31.7	33.4	35.1	36.8	38.5	40.2	41.9	43.6	45.3	46.1
1972	26.6	28.6	30.5	32.2	33.9	35.6	37.3	39.0	40.7	42.4	44.1	45.8	46.6
1973	27.1	29.1	31.0	32.7	34.4	36.1	37.8	39.5	41.2	42.9	44.6	46.3	47.1
1974	27.6	29.6	31.5	33.2	34.9	36							

MEAN	41.7	43.0	49.1	58.7	67.2	75.3	79.4	79.6	79.3	63.0	52.9	44.3	60.5
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HEATING DEGREE DAYS

Summer	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1534-35							567	581	793	837	215	38	5
1535-36							521	528	621	638	421	214	3
1536-37							500	508	628	628	414	21	3383
1537-38							507	507	592	600	476	0	5
1538-39							507	507	592	600	476	0	5
1539-40							507	507	592	600	476	0	5
1540-41							507	507	592	600	476	0	5
1541-42							507	507	592	600	476	0	5
1542-43							507	507	592	600	476	0	5
1543-44							507	507	592	600	476	0	5
1544-45							507	507	592	600	476	0	5
1545-46							507	507	592	600	476	0	5
1546-47							507	507	592	600	476	0	5
1547-48							507	507	592	600	476	0	5
1548-49							507	507	592	600	476	0	5
1549-50							507	507	592	600	476	0	5
1550-51							507	507	592	600	476	0	5
1551-52							507	507	592	600	476	0	5
1552-53							507	507	592	600	476	0	5
1553-54							507	507	592	600	476	0	5
1554-55							507	507	592	600	476	0	5
1555-56							507	507	592	600	476	0	5
1556-57							507	507	592	600	476	0	5
1557-58							507	507	592	600	476	0	5
1558-59							507	507	592	600	476	0	5
1559-60							507	507	592	600	476	0	5
1560-61							507	507	592	600	476	0	5
1561-62							507	507	592	600	476	0	5
1562-63							507	507	592	600	476	0	5
1563-64							507	507	592	600	476	0	5
1564-65							507	507	592	600	476	0	5
1565-66							507	507	592	600	476	0	5
1566-67							507	507	592	600	476	0	5
1567-68							507	507	592	600	476	0	5
1568-69							507	507	592	600	476	0	5
1569-70							507	507	592	600	476	0	5
1570-71							507	507	592	600	476	0	5
1571-72							507	507	592	600	476	0	5
1572-73							507	507	592	600	476	0	5
1573-74							507	507	592	600	476	0	5
1574-75							507	507	592	600	476	0	5
1575-76							507	507	592	600	476	0	5
1576-77													

MEAN	0	0	7	114	367	635	716	615	494	222	50	3251
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The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "p" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**NORFOLK, VIRGINIA**



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
13750		Norfolk, Virginia		36°57'N		76°17'W		15		KNGU			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office (ops bldg)	NAS	1949	1960	36°57'N	76°17'W	21	Mercurial	24				
2.	" " " "	"	1960	1962	"	"	34	"	24				
3.	" " " "	"	1962	1966	"	"	32	"	24				
4.	" " " "	FWC	1966	1976	"	"	32	"	24				
1a.	" " " (Bldg LP-1)	"	1966		"	"	36	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		Atop control tower	*Selsyn	Double register	80'	1. Barometer, aneroid 2. Barograph 3. Semi-auto met sta (AN/GMQ-14B)
1a.	Installed 1955	Three eights mile due east of the operations building	UMQ-5	RD-108	6'	4. Ceiling light (ML-121) 5. Cloud height set (AN/GMQ-13) 6. Transmissometer (AN/GMQ-10) 7. Weather radar (FPS-81) 8. RVR indicator (Model CJ002)
		* Date disassembled unknown				

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Oceana is located within the resort and agricultural city of Virginia Beach, Virginia. The airfield is surrounded by wooded areas, farmland, and swamps. The Atlantic Ocean lies 3 miles to the east. Chesapeake Bay entrance lies 7 miles to the north. Oceana's weather is markedly influenced by the maritime regime. A coastal plain extends about 150 miles to the west where the Appalachian Mountains rise to extreme heights of over 5,000 feet. Weather systems traversing the Appalachians are sometimes markedly modified in movement and character of weather by blocking action and lifting over the mountains. Oceana enjoys a favorable location in respect to severe storm tracks. Most extratropical storms tend to pass to the north while tropical storms track mainly to the south. The moderating effect of a predominantly maritime regime and a favorable storm track position results in a favorable climate with brief departures from climate means.

Winters are mild, temperature departures associated with polar outbreaks last about two days. Coastal storms account for most of the rainfall and high winds during the winter months. Snowfalls of any magnitude are rare. Winds during this period prevail from the northeast with a secondary flow from the southwest, high winds are often associated with sharp cold frontal passages.

Summer months are especially pleasant in the near-coastal areas; surface winds prevail from the southwest during this season. The seabreeze will occasionally commence as early as ten in the morning. Advection-radiation fog has its highest incidence during August. An overriding cloud cover will sometimes delay fog dissipation to early afternoon hours, usually however, the fog lifts between 0800 and 0930. Thunderstorm activity reaches its maximum of 9 days per month in July. Flight operations are seldom affected by severe thunderstorm activity which usually extends from North Carolina southward. September-October are high tropical storm incidence months. Storms originating in the Gulf of Mexico or the Western Atlantic are most likely to pass close to Oceana during this period.

The fall season is very pleasant, mean temperatures gradually fall from low 70's to low 50's by November. Polar frontal intrusions become more numerous as the Bermuda high extension weakens. By November the polar front is established well to the south of Oceana; waves moving along this front account for much of the precipitation received.

Annual flying conditions at NAS Oceana are generally good with the field at or above Visual Flight Rule (VFR) minimums 87% of the year. Ceilings and visibility fall below 400 feet and 1 mile visibility less than 4% of the year.

OCEANA, VIRGINIA



STN LTRS: KNTU  
WBAN # 13769  
WMO # 1

SAVED

[illegible]REMARKS: \*DATA NOT AVAILABLE. # LEST HAN.03AY.05 OR 0.05 INCL. A DR 0.5 PERCENT AS APPLICABLE. THE YING.  
\*THE VALUE LISTED UNDER "PRESS ALT BKT 90.98" INDICATES IT IS EXCEEDED ONLY 0.05% OF  
EYN MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE  
COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD. \*FOR).

FLYING MEA & HRS LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	01	12	11	10	11	6	3	4	6	10	8	11	9	27
LESS 1000	04	14	12	10	12	9	4	8	9	12	10	11	11	27
PT AND/OR	07	17	14	11	13	11	4	8	12	13	10	14	12	30
LESS 1 MI	10	14	12	9	9	7	4	4	7	10	8	10	9	30
CEILING	13	12	10	7	7	4	3	3	6	8	8	10	8	29
LESS 1000	16	12	9	7	8	5	3	3	6	9	8	10	8	27
PT AND/OR	19	13	10	8	8	6	2	4	6	9	8	10	8	28
LESS 1 MI	22	14	11	9	9	7	4	5	7	10	8	11	9	28
ALL HRS	13	13	11	9	10	6	4	3	7	10	8	11	9	28
CEILING	01	7	5	4	5	2	1	1	2	4	4	6	4	27
LESS 1000	04	7	6	7	7	2	1	3	3	5	3	6	5	27
PT AND/OR	07	7	6	5	5	3	1	1	3	4	3	6	4	30
LESS 1 MI	10	4	5	2	1	0	0	0	1	1	1	4	2	30
CEILING	13	4	3	1	0	0	0	0	0	1	1	4	2	30
LESS 1000	16	3	3	1	0	0	0	0	0	1	1	4	2	29
PT AND/OR	19	4	4	3	3	1	0	1	1	2	2	4	3	27
LESS 1 MI	22	5	5	3	4	2	0	0	1	3	3	4	3	27
ALL HRS	5	5	5	3	3	1	1	1	1	3	3	4	3	28
CEILING	01	2	2	1	1	0	0	0	0	1	1	2	1	27
LESS 1000	04	2	2	1	1	0	0	0	1	2	1	2	1	27
PT AND/OR	07	2	1	0	0	0	0	0	0	2	1	2	1	30
LESS 1 MI	10	1	1	0	0	0	0	0	0	0	0	0	0	30
CEILING	13	0	0	0	0	0	0	0	0	0	0	0	0	30
LESS 1000	16	0	0	0	0	0	0	0	0	0	0	0	0	29
PT AND/OR	19	1	1	1	1	0	0	0	0	1	1	1	1	27
LESS 1/4 MI	22	1	1	1	1	0	0	0	0	1	1	1	1	27
ALL HRS	1	1	1	1	1	0	0	0	0	1	1	1	1	28



Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1905	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1906	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1907	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1908	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1909	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1910	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1911	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1912	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1913	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1914	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1915	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1916	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1917	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1918	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1919	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1920	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1921	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1922	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1923	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1924	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1925	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1926	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1927	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1928	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1929	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1930	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1931	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1932	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1933	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1934	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1935	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1936	W	W	W	59.0	61.2 <sup>P</sup>	60.0	70.0	77.0	76.5	82.0	84.0	H	H
1937	W	W	W										

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
43-44	C	C	C	123	331	H	H	H	H	935	H	72	13
44-45	C	C	C	H	H	H	H	H	H	H	H	H	H
45-46	C	C	C	H	H	H	H	H	H	H	H	H	H
46-47	C	C	C	H	H	H	H	H	H	H	H	H	H
47-48	C	C	C	H	H	H	H	H	H	H	H	H	H
48-49	C	C	C	H	H	H	H	H	H	H	H	H	H
49-50	C	C	C	H	H	H	H	H	H	H	H	H	H
50-51	C	C	C	H	H	H	H	H	H	H	H	H	H
51-52	C	C	C	H	H	H	H	H	H	H	H	H	H
52-53	C	C	C	H	H	H	H	H	H	H	H	H	H
53-54	C	C	C	213	386	654	547	516	424	226	10	3	2894
54-55	C	C	C	1	95	376	574	679	437	169	100	0	2788
55-56	C	C	C	7	150	457	774	830	665	400	181	69	2
56-57	C	C	C	15	320	815	930	811	646	525	299	134	2
57-58	C	C	C	15	320	815	930	811	646	525	299	134	2
58-59	C	C	C	15	320	815	930	811	646	525	299	134	2
59-60	C	C	C	15	320	815	930	811	646	525	299	134	2
60-61	C	C	C	15	320	815	930	811	646	525	299	134	2
61-62	C	C	C	15	320	815	930	811	646	525	299	134	2
62-63	C	C	C	15	320	815	930	811	646	525	299	134	2
63-64	C	C	C	15	320	815	930	811	646	525	299	134	2
64-65	C	C	C	15	320	815	930	811	646	525	299	134	2
65-66	C	C	C	15	320	815	930	811	646	525	299	134	2
66-67	C	C	C	15	320	815	930	811	646	525	299	134	2
67-68	C	C	C	15	320	815	930	811	646	525	299	134	2
68-69	C	C	C	15	320	815	930	811	646	525	299	134	2
69-70	C	C	C	15	320	815	930	811	646	525	299	134	2
70-71	C	C	C	15	320	815	930	811	646	525	299	134	2
71-72	C	C	C	15	320	815	930	811	646	525	299	134	2
72-73	C	C	C	15	320	815	930	811	646	525	299	134	2
73-74	C	C	C	15	320	815	930	811	646	525	299	134	2
74-75	C	C	C	15	320	815	930	811	646	525	299	134	2
75-76	C	C	C	15	320	815	930	811	646	525	299	134	2
76-77	C	C	C	15	320	815	930	811	646	525	299	134	2
77-78	C	C	C	15	320	815	930	811	646	525	299	134	2
78-79	C	C	C	15	320	815	930	811	646	525	299	134	2
79-80	C	C	C	15	320	815	930	811	646	525	299	134	2
80-81	C	C	C	15	320	815	930	811	646	525	299	134	2
81-82	C	C	C	15	320	815	930	811	646	525	299	134	2
82-83	C	C	C	15	320	815	930	811	646	5			

cord; "p" denotes partial record, i.e. less than 10 days record missing. Partial monthly values were not included in means.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904													
1905													
1906													
1907													
1908													
1909													
1910													
1911													
1912													
1913													
1914													
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1962													
1963													
1964													

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1845	W	1	24	108	363	440	378	552	39	21		W	1
1846	W	1	1	W	W	W	W	W	W	W	W	W	1
1847	W	1	1	W	W	W	W	W	W	W	W	W	1
1848	W	1	1	W	W	W	W	W	W	W	W	W	1
1849	W	1	1	W	W	W	W	W	W	W	W	W	1
1850	W	1	1	W	W	W	W	W	W	W	W	W	1
1851	W	1	1	W	W	W	W	W	W	W	W	W	1
1852	W	1	1	W	W	W	W	W	W	W	W	W	1
1853	W	1	1	W	W	W	W	W	W	W	W	W	1
1854	W	1	1	W	W	W	W	W	W	W	W	W	1
1855	W	1	1	W	W	W	W	W	W	W	W	W	1
1856	W	1	1	W	W	W	W	W	W	W	W	W	1
1857	W	1	1	W	W	W	W	W	W	W	W	W	1
1858	W	1	1	W	W	W	W	W	W	W	W	W	1
1859	W	1	1	W	W	W	W	W	W	W	W	W	1
1860	W	1	1	W	W	W	W	W	W	W	W	W	1
1861	W	1	1	W	W	W	W	W	W	W	W	W	1
1862	W	1	1	W	W	W	W	W	W	W	W	W	1
1863	W	1	1	W	W	W	W	W	W	W	W	W	1
1864	W	1	1	W	W	W	W	W	W	W	W	W	1
1865	W	1	1	W	W	W	W	W	W	W	W	W	1
1866	W	1	1	W	W	W	W	W	W	W	W	W	1
1867	W	1	1	W	W	W	W	W	W	W	W	W	1
1868	W	1	1	W	W	W	W	W	W	W	W	W	1
1869	W	1	1	W	W	W	W	W	W	W	W	W	1
1870	W	1	1	W	W	W	W	W	W	W	W	W	1
1871	W	1	1	W	W	W	W	W	W	W	W	W	1
1872	W	1	1	W	W	W	W	W	W	W	W	W	1
1873	W	1	1	W	W	W	W	W	W	W	W	W	1
1874	W	1	1	W	W	W	W	W	W	W	W	W	1
1875	W	1	1	W	W	W	W	W	W	W	W	W	1
1876	W	1	1	W	W	W	W	W	W	W	W	W	1
1877	W	1	1	W	W	W	W	W	W	W	W	W	1
1878	W	1	1	W	W	W	W	W	W	W	W	W	1
1879	W	1	1	W	W	W	W	W	W	W	W	W	1
1880	W	1	1	W	W	W	W	W	W	W	W	W	1
1881	W	1	1	W	W	W	W	W	W	W	W	W	1
1882	W	1	1	W	W	W	W	W	W	W	W	W	1
1883	W	1	1	W	W	W	W	W	W	W	W	W	1
1884	W	1	1	W	W	W	W	W	W	W	W	W	1
1885	W	1	1	W	W	W	W	W	W	W	W	W	1
1886	W	1	1	W	W	W	W	W	W	W	W	W	1
1887	W	1	1	W	W	W	W	W	W	W	W	W	1
1888	W	1											

**OCEANA, VIRGINIA**







# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Weather Service Environmental Detachment Patuxent River is part of the Naval Air Test Center, which occupies a broad headland jutting into the Chesapeake Bay just south of the effluence of the Patuxent River. The Potomac River empties into the Chesapeake Bay 15 miles south of the Test Center. The Atlantic Ocean is 60 miles to the east. Predictably, these water bodies produce a moderating effect on temperatures and a definite sea breeze. The several peninsulas which make up the land mass surrounding the complex are characterized by undulating land generally less than 200 feet in height. To the northwest about 85 miles distant the Appalachian Mountain Range provides an important obstruction to advancing fronts. An important topographical influence 15 miles to the west is the Potomac River; air mass thunderstorms have a tendency to follow the course of the river and skirt the complex.

The Chesapeake area has an extremely variable weather pattern during the fall through spring seasons. Summers are very warm and humid, winters are generally mild. However, winter weather has proven to be freakish as several heavy snowstorms attest. Fall and spring seasons are typically transitional.

Flying conditions, although variable, are generally good. Instrument flight rule conditions exist 11.6% of the time annually.

Fog is the principal hazard to aviation during the winter months and is prevalent throughout the year. Prefrontal and advection fog is most prevalent in winter, while radiation fog is a lesser factor in fall and summer. Haze is prevalent in the Patuxent area during the entire year but it is a major hazard to aviation only during the summer.

The prevailing wind direction for Patuxent River is northwesterly from October through April as the flow pattern is dominated by the continental high pressure systems. The May through September flow is influenced by the Bermuda high pressure system which brings a south to southwest flow pattern over the area.

Nighttime winds during this period are light south to southwest. The sea breeze asserts a strong influence during the daytime.

Patuxent seemingly is threatened by most tropical systems as they make their recurring trek up the east coast of the United States, but only about one storm every 5 years will come close enough to effect the area seriously.

Snowfall in the area is quite variable. Periods of 3 or 4 years with measurable snowfall of less than 2 inches are common. Precipitation amounts are spread fairly evenly throughout the year with no real pronounced wet or dry seasons.

PATUXENT RIVER, MARYLAND







## TOTAL PRECIPITATION INCHES

[illegible]

**COOLING DEGREE DAYS**

[illegible]

## MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1945	33.8	35.0	38.6	38.6	42.2	73.7	75.0	73.8	73.7	78.2	81.2	73.8	746.5
1946	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1947	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1948	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1949	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1950	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1951	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1952	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1953	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1954	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1955	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1956	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1957	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1958	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1959	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1960	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1961	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1962	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1963	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1964	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1965	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1966	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1967	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1968	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1969	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1970	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1971	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1972	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1973	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5
1974	33.8	34.2	38.8	38.6	42.0	72.0	74.1	73.8	73.7	78.2	81.2	73.8	746.5

## HEATING DEGREE DAYS

Season	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
4-4-5	0	0	4	132	3	354	834	481	349	204	120	23	0
5-4-5	0	0	4	116	335	459	499	491	311	203	10	10	3882
6-4-5	0	0	36	84	237	818	1081	786	961	310	80	7	4324
7-4-5	0	0	13	258	349	751	636	549	469	312	40	1	3506
8-4-5	0	0	31	77	432	481	499	717	717	404	104	0	4693
9-4-5	0	0	44	127	489	874	761	749	411	318	69	9	4693
10-5-5	0	0	9	27	27	749	749	749	411	318	69	9	4693
11-5-5	0	0	9	27	27	749	749	749	411	318	69	9	4693
12-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
1-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
2-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
3-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
4-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
5-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
6-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
7-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
8-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
9-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
10-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
11-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
12-5-5	0	0	14	137	462	749	749	749	411	318	69	9	4693
1-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
2-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
3-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
4-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
5-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
6-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
7-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
8-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
9-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
10-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
11-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
12-5-6	0	0	14	137	462	749	749	749	411	318	69	9	4693
1-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
2-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
3-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
4-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
5-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
6-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
7-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
8-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
9-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
10-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
11-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
12-5-7	0	0	14	137	462	749	749	749	411	318	69	9	4693
1-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
2-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
3-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
4-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
5-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
6-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
7-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
8-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
9-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
10-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
11-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693
12-5-8	0	0	14	137	462	749	749	749	411	318	69	9	4693

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "p" denotes partial record, i.e. less than 10 days record missing.



STATION NO OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
13721		Patuxent River, Maryland		38°18'N		76°25'W		38		KNHK		72404	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office (ops bldg)	Navy	1949	1957	38°18'N	76°25'W	45	Mercurial	24				
2.	" " " "	"	1957		"	"	45	"	24				
1a.	" " " "	"	1960		"	"	46	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	MT ABOVE GROUND	
1.	Installed	Atop operations tower	3 cup		95'	1. Auto met sta (AN/GMQ-29)
2.	1957	Atop radar tower (bldg 147A)	AN/GMQ-5	RD-108	65'	2. Ceiling light (ML 121H)
3.	1960	1000' NW of intersection of runways 31 and 24	"	"	13'	3. Cloud height set (GMQ-13B/C)
						4. Transmissometer (GMQ-10)
						5. Runway visual range
						6. Seawater-air temp (honeywell)
						7. Weather vision (AN/GMQ-27)
						8. WSR 57 radar operated by National Weather Service

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Sherman Field, Naval Air Station Pensacola is situated 1 mile due north of the entrance to Pensacola Bay. An off-shore island extending westward and Santa Rosa Island extending eastward separates the Gulf of Mexico from Pensacola Bay and forms a natural breakwater for the harbor.

The terrain surrounding the air station is flat and does little to impede the passage of storms from the west and southwest. To the south Pensacola Bay opens into the Gulf of Mexico. To the west, north and east (with the exception of the city of Pensacola directly northeast of the station) are expanses of scrub pine forests. Because of the regularity of terrain elevation, topographical effects are minor.

There is considerable industry in the Pensacola metropolitan area located mainly northeast of the station. This is a source of smoke pollution. During periods of drought, mostly in the fall, brush fires inland are also a source of large amounts of smoke.

The Gulf of Mexico presents a moderating effect on the local area, resulting in a definite sea breeze during the daytime in the summer and tempering the effects of polar outbreaks in the winter.

Tropical cyclone disturbances pose a threat to the Pensacola complex during the hurricane season (1 June through 30 November). Several destructive hurricanes have been experienced in this area; two of the more extreme occurred in September 1906 and in September 1926. Hurricanes which form in the Atlantic often recurve to the north and northeast and do not enter the Gulf of Mexico. However, once such storms have reached the Gulf of Mexico from the Western Caribbean or have crossed the Florida Peninsula from the east into the Gulf, there is no land mass to hinder their movement north to the Central Gulf Coast. In general, the major weather problems that affect flying safety are tropical storms, severe thunderstorms, and seasonal fog.

Rainfall occurs on an average of 9 days per month, ranging from 6 days in April and October to 13 days in July. On the average, measurable amounts occur 109 days a year. The average annual precipitation is 54 inches. A considerable part of the rainfall in the summer occurs during daylight hours from thunderstorms. Rainfall during the winter months extends over longer periods but as a rule, it is not as heavy. Solid precipitation in the form of snow, snow pellets, and ice pellets are rarities and occur on the average of once a year. Approximately 2½ inches of the average rainfall during the month of September can be attributed to tropical disturbances.

PENSACOLA, FLORIDA







# MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1935	52.0	48.2	54.5	61.5	68.5	75.0	81.0	82.2	80.1	78.3	75.0	71.8	68.7
1936	52.5	48.7	55.0	62.0	69.0	75.5	81.5	82.5	80.5	78.5	75.5	72.5	69.5
1937	53.0	49.2	55.5	62.5	69.5	76.0	82.0	83.0	81.0	79.0	76.0	73.0	70.0
1938	53.5	49.7	56.0	63.0	70.0	76.5	82.5	83.5	81.5	79.5	76.5	73.5	70.5
1939	54.0	50.2	56.5	63.5	70.5	77.0	83.0	84.0	82.0	80.0	77.0	74.0	71.0
1940	54.5	50.7	57.0	64.0	71.0	77.5	83.5	84.5	82.5	80.5	77.5	74.5	71.5
1941	55.0	51.2	57.5	64.5	71.5	78.0	84.0	85.0	83.0	81.0	78.0	75.0	72.0
1942	55.5	51.7	58.0	65.0	72.0	78.5	84.5	85.5	83.5	81.5	78.5	75.5	72.5
1943	56.0	52.2	58.5	65.5	72.5	79.0	85.0	86.0	84.0	82.0	79.0	76.0	73.0
1944	56.5	52.7	59.0	66.0	73.0	79.5	85.5	86.5	84.5	82.5	79.5	76.5	73.5
1945	57.0	53.2	59.5	66.5	73.5	80.0	86.0	87.0	85.0	83.0	80.0	77.0	74.0
1946	57.5	53.7	60.0	67.0	74.0	80.5	86.5	87.5	85.5	83.5	80.5	77.5	74.5
1947	58.0	54.2	60.5	67.5	74.5	81.0	87.0	88.0	86.0	84.0	81.0	78.0	75.0
1948	58.5	54.7	61.0	68.0	75.0	81.5	87.5	88.5	86.5	84.5	81.5	78.5	75.5
1949	59.0	55.2	61.5	68.5	75.5	82.0	88.0	89.0	87.0	85.0	82.0	79.0	76.0
1950	59.5	55.7	62.0	69.0	76.0	82.5	88.5	89.5	87.5	85.5	82.5	79.5	76.5
1951	60.0	56.2	62.5	69.5	76.5	83.0	89.0	90.0	88.0	86.0	83.0	80.0	77.0
1952	60.5	56.7	63.0	70.0	77.0	83.5	89.5	90.5	88.5	86.5	83.5	80.5	77.5
1953	61.0	57.2	63.5	70.5	77.5	84.0	90.0	91.0	89.0	87.0	84.0	81.0	78.0
1954	61.5	57.7	64.0	71.0	78.0	84.5	90.5	91.5	89.5	87.5	84.5	81.5	78.5
1955	62.0	58.2	64.5	71.5	78.5	85.0	91.0	92.0	90.0	88.0	85.0	82.0	79.0
1956	62.5	58.7	65.0	72.0	79.0	85.5	91.5	92.5	90.5	88.5	85.5	82.5	79.5
1957	63.0	59.2	65.5	72.5	79.5	86.0	92.0	93.0	91.0	89.0	86.0	83.0	80.0
1958	63.5	59.7	66.0	73.0	80.0	86.5	92.5	93.5	91.5	89.5	86.5	83.5	80.5
1959	64.0	60.2	66.5	73.5	80.5	87.0	93.0	94.0	92.0	90.0	87.0	84.0	81.0
1960	64.5	60.7	67.0	74.0	81.0	87.5	93.5	94.5	92.5	90.5	87.5	84.5	81.5
1961	65.0	61.2	67.5	74.5	81.5	88.0	94.0	95.0	93.0	91.0	88.0	85.0	82.0
1962	65.5	61.7	68.0	75.0	82.0	88.5	94.5	95.5	93.5	91.5	88.5	85.5	82.5
1963	66.0	62.2	68.5	75.5	82.5	89.0	95.0	96.0	94.0	92.0	89.0	86.0	83.0
1964	66.5	62.7	69.0	76.0	83.0	89.5	95.5	96.5	94.5	92.5	89.5	86.5	83.5
1965	67.0	63.2	69.5	76.5	83.5	90.0	96.0	97.0	95.0	93.0	90.0	87.0	84.0
1966	67.5	63.7	70.0	77.0	84.0	90.5	96.5	97.5	95.5	93.5	90.5	87.5	84.5
1967	68.0	64.2	70.5	77.5	84.5	91.0	97.0	98.0	96.0	94.0	91.0	88.0	85.0
1968	68.5	64.7	71.0	78.0	85.0	91.5	97.5	98.5	96.5	94.5	91.5	88.5	85.5
1969	69.0	65.2	71.5	78.5	85.5	92.0	98.0	99.0	97.0	95.0	92.0	89.0	86.0
1970	69.5	65.7	72.0	79.0	86.0	92.5	98.5	99.5	97.5	95.5	92.5	89.5	86.5
1971	70.0	66.2	72.5	79.5	86.5	93.0	99.0	100.0	98.0	96.0	93.0	90.0	87.0
1972	70.5	66.7	73.0	80.0	87.0	93.5	99.5	100.5	98.5	96.5	93.5	90.5	87.5
1973	71.0	67.2	73.5	80.5	87.5	94.0	100.0	101.0	99.0	97.0	94.0	91.0	88.0
1974	71.5	67.7	74.0	81.0	88.0	94.5	100.5	101.5	99.5	97.5	94.5	91.5	88.5
1975	72.0	68.2	74.5	81.5	88.5	95.0	101.0	102.0	100.0	98.0	95.0	92.0	89.0
1976	72.5	68.7	75.0	82.0	89.0	95.5	101.5	102.5	100.5	98.5	95.5	92.5	89.5
1977	73.0	69.2	75.5	82.5	89.5	96.0	102.0	103.0	101.0	99.0	96.0	93.0	90.0
1978	73.5	69.7	76.0	83.0	90.0	96.5	102.5	103.5	101.5	99.5	96.5	93.5	90.5
1979	74.0	70.2	76.5	83.5	90.5	97.0	103.0	104.0	102.0	100.0	97.0	94.0	91.0
1980	74.5	70.7	77.0	84.0	91.0	97.5	103.5	104.5	102.5	100.5	97.5	94.5	91.5
1981	75.0	71.2	77.5	84.5	91.5	98.0	104.0	105.0	103.0	101.0	98.0	95.0	92.0
1982	75.5	71.7	78.0	85.0	92.0	98.5	104.5	105.5	103.5	101.5	98.5	95.5	92.5
1983	76.0	72.2	78.5	85.5	92.5	99.0	105.0	106.0	104.0	102.0	99.0	96.0	93.0
1984	76.5	72.7	79.0	86.0	93.0	99.5	105.5	106.5	104.5	102.5	99.5	96.5	93.5
1985	77.0	73.2	79.5	86.5	93.5	100.0	106.0	107.0	105.0	103.0	100.0	97.0	94.0
1986	77.5	73.7	80.0	87.0	94.0	100.5	106.5	107.5	105.5	103.5	100.5	97.5	94.5
1987	78.0	74.2	80.5	87.5	94.5	101.0	107.0	108.0	106.0	104.0	101.0	98.0	95.0
1988	78.5	74.7	81.0	88.0	95.0	101.5	107.5	108.5	106.5	104.5	101.5	98.5	95.5
1989	79.0	75.2	81.5	88.5	95.5	102.0	108.0	109.0	107.0	105.0	102.0	99.0	96.0
1990	79.5	75.7	82.0	89.0	96.0	102.5	108.5	109.5	107.5	105.5	102.5	99.5	96.5
1991	80.0	76.2	82.5	89.5	96.5	103.0	109.0	110.0	108.0	106.0	103.0	100.0	97.0
1992	80.5	76.7	83.0	90.0	97.0	103.5	109.5	110.5	108.5	106.5	103.5	100.5	97.5
1993	81.0	77.2	83.5	90.5	97.5	104.0	110.0	111.0	109.0	107.0	104.0	101.0	98.0
1994	81.5	77.7	84.0	91.0	98.0	104.5	110.5	111.5	109.5	107.5	104.5	101.5	98.5
1995	82.0	78.2	84.5	91.5	98.5	105.0	111.0	112.0	110.0	108.0	105.0	102.0	99.0
1996	82.5	78.7	85.0	92.0	99.0	105.5	111.5	112.5	110.5	108.5	105.5	102.5	99.5
1997	83.0	79.2	85.5	92.5	99.5	106.0	112.0	113.0	111.0	109.0	106.0	103.0	100.0
1998	83.5	79.7	86.0	93.0	100.0	106.5	112.5	113.5	111.5	109.5	106.5	103.5	100.5
1999	84.0	80.2	86.5	93.5	100.5	107.0	113.0	114.0	112.0	110.0	107.0	104.0	101.0
2000	84.5	80.7	87.0	94.0	101.0	107.5	113.5	114.5	112.5	110.5	107.5	104.5	101.5
2001	85.0	81.2	87.5	94.5	101.5	108.0	114.0	115.0	113.0	111.0	108.0	105.0	102.0
2002	85.5	81.7	88.0	95.0	102.0	108.5	114.5	115.5	113.5	111.5	108.5	105.5	102.5
2003	86.0	82.2	88.5	95.5	102.5	109.0	115.0	116.0	114.0	112.0	109.0	106.0	103.0
2004	86.5	82.7	89.0	96.0	103.0	109.5	115.5	116.5	114.5	112.5	109.5	106.5	103.5
2005	87.0	83.2	89.5	96.5	103.5	110.0	116.0	117.0	115.0	113.0	110.0	107.0	104.0
2006	87.5	83.7	90.0	97.0	104.0	110.5	116.5	117.5	115.5	113.5	110.5	107.5	104.5
2007	88.0	84.2	90.5	97.5	104.5	111.0	117.0	118.0	116.0	114.0	111.0	108.0	105.0
2008	88.5	84.7	91.0	98.0	105.0	111.5	117.5	118.5	116.5	114.5	111.5	108.5	105.5
2009	89.0	85.2	91.5	98.5	105.5	112.0	118.0	119.0	117.0	115.0	112.0	109.0	106.0
2010	89.5	85.7	92.0	99.0	106.0	112.5	118.5	119.5	117.5	115.5	112.5	109.5	106.5
2011	90.0	86.2	92.5	99.5	106.5	113.0	119.0	120.0	118.0	116.0	113.0	110.0	107.0
2012	90.5	86.7	93.0	100.0	107.0	113.5	119.5	120.5	118.5	116.5	113.5	110.5	107.5
2013	91.0	87.2	93.5	100.5	107.5	114.0	120.0	121.0	119.0	117.0	114.0	111.0	108.0
2014	91.5	87.7	94.0	101.0	108.0	114.5	120.5	121.5	119.5	117.5	114.5	111.5	108.5
2015	92.0	88.2	94.5	101.5	108.5	115.0	121.0	122.0	120.0	118.0	115.0	112.0	109.0
2016	92.5	88.7	95.0	102.0	109.0	115.5	121.5	122.5	120.5	118.5	115.5	112.5	109.5
2017	93.0	89.2	95.5	102.5	109.5	116.0	122.0	123.0	121.0	119.0	116.0	113.0	110.0
2018	93.5	89.7	96.0	103.0	110.0	116.5	122.5	123.5	121.5	119.5	116.5	113.5	110.5
2019	94.0	90.2	96.5	103.5	110.5	117.0	123.0	124.0	122.0	120.0	117.0	114.0	111.0
2020	94.5	90.7	97.0	104.0	111.0	117.5	123.5	124.5	122.5	120.5	117.5	114.5	111.5
2021	95.0	91.2	97.5	104.5	111.5	118.0	124.0	125.0	123.0	121.0	118.0	115.0	112.0
2022	95.5	91.7	98.0	105.0	112.0	118.5	124.5	125.5	123.5	121.5	118.5	115.5	112.5
2023	96.0	92.2	98.5	105.5	112.5	119.0	125.0	126.0	124.0	122.0	119.0	116.0	113.0
2024	96.5	92.7	99.0	106.0	113.0	119.5	125.5	126.5	124.5				



STATION NO. ON SUMMARY: 03855		STATION NAME Pensacola, Florida		LATITUDE 30°21'N		LONGITUDE 87°19'W		STATION ELEV. (FT.) 30		CALL SIGN KNPA		WMO NUMBER	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT TIME LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Meteorological office spaces	Navy	1956	1971	30°21'N	87°19'W	33	Mercurial	24				
2.	"	"	1971	1976	"	"	34	"	24				
1a.	"	"	1964	1976	"	"	35.5	Aneroid	24				
2a.	"	"	1976		"	"	"	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1956	Roof of control tower	UMQ-5C	RD-108B	75'	1. Barograph (marine type) 2. Auto met station (GMQ-29) 3. Ceiling light (ML 121) 4. Cloud height set (GMQ 13) 5. Transmissometer (GMQ 10C) 6. Radar VID Repeater (WSRR-63) 7. Weather vision (GMQ-19A(V)) 8. GOES (Mod 9271 O/H) 9. RATT-68 (FMH 6)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Point Mugu, site of Headquarters, Pacific Missile Test Center, is located on the coast 53 miles west-northwest of Los Angeles.

The average elevation of Point Mugu is 12 feet. The terrain rises gradually to the north and northwest to the foothills of the Topa Topa Mountains. The principal terrain feature of the immediate vicinity lies 2 miles to the east; the western extremity of the Santa Monica Mountains; marked by Laguna Peak (1,457 feet).

The most characteristic feature of this area's climate is the night and early morning low cloudiness and sunny afternoons that prevail during the spring and summer months.

The annual daily temperature range is about 16 degrees F., with slightly greater ranges in winter than in summer. The mean monthly temperatures range from 54.5 degrees F. in January to 66 degrees F. in August. The warmest temperatures usually occur in late summer and early fall with daily maxima in the upper 80's and low 90's not

unusual. The extreme maximum temperature of 104 degrees F. occurred in October 1971; the extreme minimum temperature of 27 degrees F. occurred in February 1971 and December 1972.

Prevailing daytime surface winds are from the west at 8-12 knots, and become northerly in the evening hours at about 5 knots. Prevailing conditions are occasionally interrupted for a 2 to 3 day period of strong, gusty and dry northeasterly winds called the "Santa Ana". The relative humidity drops to less than 20% and the fire danger in the brush-covered hillsides rises to extreme proportions.

Summer precipitation is most often in the form of early morning drizzle, and typically leaves only trace amounts. More than 85% of the precipitation falls during the period of November through March. Thunderstorms are uncommon at Point Mugu.

Surface visibility is most often restricted by fog and haze in the early morning hours. However, in the afternoon, smoke or haze transported up the coast from the Los Angeles basin on southeasterly winds frequently restricts the visibility regardless of the season.

POINT MUGU, CALIFORNIA







## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1960	50.8	52.0	56.7	57.1	56.7	51.4	49.3	52.7	44.3	59.1	56.2	54.8	55.7
1961	46.2	50.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1962	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1963	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1964	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1965	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1966	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1967	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1968	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1969	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1970	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1971	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1972	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1973	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1974	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1975	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1976	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1977	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1978	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1979	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1980	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1981	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1982	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1983	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1984	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1985	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1986	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1987	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1988	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1989	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7
1990	50.0	52.0	55.2	55.5	56.7	56.7	49.7	49.3	47.8	51.4	51.0	53.6	51.7

MEAN	56.3	55.7	55.9	55.8	56.5	61.4	66.0	66.1	65.6	62.6	58.2	54.1	59.1
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## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct.	Nov.	Dec.	Annual
1960	2.15	2.44	2.24	2.5	2	2	2	2	2	2	2.52	2.5	19.41
1961	1.97	2.17	2.2	2.5	2.1	2.1	2	2	2	2	2.42	2.5	19.41
1962	2.06	2.29	2.12	2.6	2.2	2.2	2	2	2	2	2.51	2.5	19.41
1963	2.07	2.29	2.12	2.6	2.2	2.2	2	2	2	2	2.51	2.5	19.41
1964	1.91	2.05	1.95	2.2	2.1	2.1	2	2	2	2	2.41	2.5	19.41
1965	2.04	2.2	2.1	2.3	2.1	2	2	2	2	2	2.41	2.5	19.70
1966	1.47	1.76	1.7	2.3	2.2	2	2	2	2	2	2.41	2.5	19.70
1967	2.48	2.6	2.4	2.7	2.7	2	2	2	2	2	2.71	2.7	19.70
1968	2.67	2.8	2.6	2.9	2.9	2	2	2	2	2	2.71	2.7	19.70
1969	1.55	1.67	1.58	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.76	1.7	19.64
1970	2.24	2.3	2.2	2.5	2	2	2	2	2	2	2.42	2.4	19.77
1971	1.48	1.4	1.37	1.7	1.7	1	1	1	1	1	1.42	1.4	19.77
1972	2.08	2.1	2.07	2.1	2.1	2	2	2	2	2	2.11	2.1	19.83
1973	2.08	2.1	2.07	2.1	2.1	2	2	2	2	2	2.11	2.1	19.83
1974	2.33	2.4	2.31	2.5	2	2	2	2	2	2	2.34	2.3	19.83
1975	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1976	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1977	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1978	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1979	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1980	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1981	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1982	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1983	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1984	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1985	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1986	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1987	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1988	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1989	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1990	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1991	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1992	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1993	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1994	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1995	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1996	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1997	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1998	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
1999	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2000	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2001	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2002	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2003	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2004	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2005	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2006	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2007	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2008	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2009	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2010	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2011	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2012	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2013	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2014	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2015	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2016	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2017	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2018	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2019	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2020	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2021	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2022	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2023	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2024	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2025	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2026	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2027	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2028	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2029	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2030	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2031	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2032	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2033	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2034	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2035	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2036	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2037	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2038	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2039	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2040	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2041	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2042	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2043	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2044	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2045	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2046	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2047	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2048	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2049	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2050	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2051	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2052	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2053	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2054	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2055	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2056	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2057	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2058	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2059	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2060	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2061	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2062	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2063	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2064	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2065	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2066	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2067	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2068	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2069	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2070	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2071	2.19	2.2	2.16	2.3	2	2	2	2	2	2	2.2	2.2	19.83
2072	2.19	2.2											

	MEAN	2.27	2.23	1.26	.71	.09	.04	.01	.07	.34	.19	1.96	1.66	10.82
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## COOLING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1930-31	59	65	54	195	454	432	342	342	276	238	189	102	2448
1931-32	59	65	54	195	454	432	342	342	276	238	189	102	2448
1932-33	59	65	54	195	454	432	342	342	276	238	189	102	2448
1933-34	59	65	54	195	454	432	342	342	276	238	189	102	2448
1934-35	59	65	54	195	454	432	342	342	276	238	189	102	2448
1935-36	59	65	54	195	454	432	342	342	276	238	189	102	2448
1936-37	59	65	54	195	454	432	342	342	276	238	189	102	2448
1937-38	59	65	54	195	454	432	342	342	276	238	189	102	2448
1938-39	59	65	54	195	454	432	342	342	276	238	189	102	2448
1939-40	59	65	54	195	454	432	342	342	276	238	189	102	2448
1940-41	59	65	54	195	454	432	342	342	276	238	189	102	2448
1941-42	59	65	54	195	454	432	342	342	276	238	189	102	2448
1942-43	59	65	54	195	454	432	342	342	276	238	189	102	2448
1943-44	59	65	54	195	454	432	342	342	276	238	189	102	2448
1944-45	59	65	54	195	454	432	342	342	276	238	189	102	2448
1945-46	59	65	54	195	454	432	342	342	276	238	189	102	2448
1946-47	59	65	54	195	454	432	342	342	276	238	189	102	2448
1947-48	59	65	54	195	454	432	342	342	276	238	189	102	2448
1948-49	59	65	54	195	454	432	342	342	276	238	189	102	2448
1949-50	59	65	54	195	454	432	342	342	276	238	189	102	2448
1950-51	59	65	54	195	454	432	342	342	276	238	189	102	2448
1951-52	59	65	54	195	454	432	342	342	276	238	189	102	2448
1952-53	59	65	54	195	454	432	342	342	276	238	189	102	2448
1953-54	59	65	54	195	454	432	342	342	276	238	189	102	2448
1954-55	59	65	54	195	454	432	342	342	276	238	189	102	2448
1955-56	59	65	54	195	454	432	342	342	276	238	189	102	2448
1956-57	59	65	54	195	454	432	342	342	276	238	189	102	2448
1957-58	59	65	54	195	454	432	342	342	276	238	189	102	2448
1958-59	59	65	54	195	454	432	342	342	276	238	189	102	2448
1959-60	59	65	54	195	454	432	342	342	276	238	189	102	2448
1960-61	59	65	54	195	454	432	342	342	276	238	189	102	2448
1961-62	59	65	54	195	454	432	342	342	276	238	189	102	2448
1962-63	59	65	54	195	454	432	342	342	276	238	189	102	2448
1963-64	59	65	54	195	454	432	342	342	276	238	189	102	2448
1964-65	59	65	54	195	454	432	342	342	276	238	189	102	2448
1965-66	59	65	54	195	454	432	342	342	276	238	189	102	2448
1966-67	59	65	54	195	454	432	342	342	276	238	189	102	2448
1967-68	59	65	54	195	454	432	342	342	276	238	189	102	2448
1968-69	59	65	54	195	454	432	342	342	276	238	189	102	2448
1969-70	59	65	54	195	454	432	342	342	276	238	189	102	2448
1970-71	59	65	54	195	454	432	342	342	276	238	189	102	2448
1971-72	59	65	54	195	454	432	342	342	276	238	189	102	2448
1972-73	59	65	54	195	454	432	342	342	276	238	189	102	2448
1973-74	59	65	54	195	454	432	342	342	276	238	189	102	2448
1974-75	59	65	54	195	454	432	342	342	276	238	189	102	2448
1975-76	59	65	54	195	454	432	342	342	276	238	189	102	2448
1976-77	59	65	54	195	454	432	342	342	276	238	189	102	2448
1977-78	59	65	54	195	454	432	342	342	276	238	189	102	2448
1978-79	59	65	54	195	454	432	342	342	276	238	189	102	2448
1979-80	59	65	54	195	454	432	342	342	276	238	189	102	2448
1980-81	59	65	54	195	454	432	342	342	276	238	189	102	2448
1981-82	59	65	54	195	454	432	342	342	276	238	189	102	2448
1982-83	59	65	54	195	454	432	342	342	276	238	189	102	2448
1983-84	59	65	54	195	454	432	342	342	276	238	189	102	2448
1984-85	59	65	54	195	454	432	342	342	276	238	189	102	2448
1985-86	59	65	54	195	454	432	342	342	276	238	189	102	2448
1986-87	59	65	54	195	454	432	342	342	276	238	189	102	2448
1987-88	59	65	54	195	454	432	342	342	276	238	189	102	2448
1988-89	59	65	54	195	454	432	342	342	276	238	189	102	2448
1989-90	59	65	54	195	454	432	342	342	276	238	189	102	2448
1990-91	59	65	54	195	454	432	342	342	276	238	189	102	2448
1991-92	59	65	54	195	454	432	342	342	276	238	189	102	2448
1992-93	59	65	54	195	454	432	342	342	276	238	189	102	2448
1993-94	59	65	54	195	454	432	342	342	276	238	189	102	2448
1994-95	59	65	54	195	454	432	342	342	276	238	189	102	2448
1995-96	59	65	54	195	454	432	342	342	276	238	189	102	2448
1996-97	59	65	54	195	454	432	342	342	276	238	189	102	2448
1997-98	59	65	54	195	454	432	342	342	276	238	189	102	2448
1998-99	59	65	54	195	454	432	342	342	276	238	189	102	2448
1999-00	59	65	54	195	454	432	342	342	276	238	189	102	2448
2000-01	59	65	54	195	454	432	342	342	276	238	189	102	2448
2001-02	59	65	54	195	454	432	342	342	276	238	189	102	2448
2002-03	59	65	54	195	454	432	342	342	276	238	189	102	2448
2003-04	59	65	54	195	454	432	342	342	276	238	189	102	2448
2004-05	59	65	54	195	454	432	342	342	276	238	189	102	2448
2005-06	59	65	54	195	454	432	342	342	276	238	189	102	2448
2006-07	59	65	54	195	454	432	342	342	276	238	189	102	2448
2007-08	59	65	54	195	454	432	342	342	276	238	189	102	2448
2008-09	59	65	54	195	454	432	342	342	276	238	189	102	2448
2009-10	59	65	54	195	454	432	342	342	276	238	189	102	2448
2010-11	59	65	54	195	454	432	342	342	276	238	189	102	2448
2011-12	59	65	54	195	454	432	342	342	276	238	189	102	2448
2012-13	59	65	54	195	454	432	342	342	276	238	189	102	2448
2013-14	59	65	54	195	454	432	342	342	276	238	189	102	2448
2014-15	59	65	54	195	454	432	342	342	276	238	189	102	2448
2015-16	59	65	54	195	454	432	342	342	276	238	189	102	2448
2016-17	59	65	54	195	454	432	342	342	276	238	189	102	2448
2017-18	59	65	54	195	454	432	342	342	276	238	189	102	2448
2018-19	59	65	54	195	454	432	342	342	276	238	189	102	2448
2019-20	59	65	54	195	454	432	342	342	276	238	189	102	2448
2020-21	59	65	54	195	454	432	342	342	276	238	189	102	2448
2021-22	59	65	54	195	454	432	342	342	276	238	189	102	2448
2022-23	59	65	54	195	454	432	342	342	276	238	189	102	2448
2023-24	59	65	54	195	454	432	342	342	276	238	189	102	2448
2024-25	59	65	54	195	454	432	342	342	276	238	189	102	2448
2025-26	59	65	54	195	454	432	342	342	276	238	189	102	2448
2026-27	59	65	54	195	454	432	342	342	276	238	189	102	2448
2027-28	59	65	54	195	454	432	342	342	276	238	189	102	2448
2028-29	59	65	54	195	454	432	342	342	276	238	189	102	2448
2029-30	59	65	54	195	454	432	342	342	276	238	189	102	2448
2030-31	59	65	54	195	454	432	342	342	276	238	189	102	2448
2031-32	59	65	54	195	454	432	342	342	276	238	189	102	2448
2032-33	59	65	54	195	454	432	342	342	276	238	189	102	2448
2033-34	59	65	54	195	454	432	342	342	276	238	189	102	2448
2034-35	59												

MEAN	51	70	32	103	210	337	335	266	110	175	196	106	2290
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## COOLING DEGREE DAYS

[illegible]

YEAR	10	2	1	4	2	5	25	62	56	34	13	6	220
1940	10	2	1	4	2	5	25	62	56	34	13	6	220

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**POINT MUGU, CALIFORNIA**



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93111		Point Mugu, California		34°07'N		119°07'W		12		KNTD		72391	
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Aerological office on second deck of hangar, bldg 34	Navy		1955	34°07'N	119°07'W	29.84	Mercurial	24				
2.	Aerological office, first deck of hangar, bldg 34	"	1955	1962	"	"	14.10	"	"				
3.	New barometer installed on second deck, bldg 34	"	1962	1964	"	"	27.30	"	"				
4.	In observer tower atop hangar 34	"	1964	1965	"	"	77.00	"	"				
5.	PMR Weather Center, bldg 552	"	1965	1966	"	"	11.25	"	"				
6.	" " " "	"	1966	1968	"	"	11.07	"	"				
7.	" " " "	"	1968	1976	"	"	11.03	"	"				
8.	PMTC " " " "	"	1976		"	"	8.77	"	"				
1a.	PMR " " " "	"	1965	1976	"	"	13.25	Aneroid	"				
2a.	PMTC " " " "	"	1976		"	"	11.58	"	"				
Wind data earlier than 1961 should not be summarized with later data since the anemometer height is not compatible with the 1961 to present exposure.													

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.		On west end of hangar roof	Selsyn	Double	79'	1. Micro-barograph (AERO 1932 USN)
1a.		Top of control tower	AN-UMQ-5		106'	2. Auto met station (AN/GMQ-29)
2.	Replaced 1957	Mounted on existing selsyn mast	AN-UMQ-5C	RD-108		3. Cloud height set (AN/GMQ-13D)
3.	1960	Change in height	"	"	93'	4. Theodolite (shore type)
4.	1961	1800 feet southwest of intersection of runways 05-23 and 11-29	"	"	13'	5. Transmissometer (AN/GMQ-10C)
5.	1964	13 feet above runway elevation, 450 feet from centerline runway 03-21, 1600 feet southwest intersection runway 03-21 and 09-27				6. Radiosonde/Rawinsonde set (AN/GMD-1B)
						7. Meteorological Satellite System (AN/GKR-4)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Quantico is located on the west bank of the Potomac River, 25 miles south-southwest of Washington, D.C. and 50 miles north of Richmond, Virginia. The Appalachian Mountains begin 70 miles to the west, while the Chesapeake Bay lies 43 miles to the east. The general area about the station is composed of small hills (less than 400 feet), separated by marshes and streams which drain into the Potomac River. In general, the area slopes to the east. The airfield is surrounded by water except to the west. The field elevation is 12 feet.

Temperatures are normally 2-3 degrees F. higher than outlying areas due to the influence of the Potomac River. Snowfall amounts are particularly influenced by the higher temperatures, with differences of 2-3 inches occurring within 1/2 mile west of the field. The mean annual snowfall is 16 inches, but the rapid melt-off results in small accumulations. More than 10 inch accumulations are rare. The mean snow depth for the months of December through March (when over 92% of the snowfall occurs) is 3 inches, 4 inches, 4 inches, and 1 inch, respectively.

Rainfall is relatively moderate, averaging close to 38 inches

annually and 3.2 inches monthly. There is no significant dry or moist season, but the month of October has the lowest average of 2.5 inches, while August has the greatest average of 4.3 inches. In 32 years of records, Quantico has never recorded a dry month; least recorded is 0.05 inch in October 1963. Maximum recorded is 13.5 inches in September 1955.

Summers are warm and humid and winters mild. During spring and autumn, generally pleasant weather prevails. Coldest weather occurs during January and February. The warmest weather occurs in late July and early August. The annual mean temperature is 57 degrees F. Temperature extremes range from - 5.0 to 105.0 degrees F. Mean relative humidity is 69%.

The visibility remains greater than 3 miles and the ceiling above 1,000 feet 90% of the time. The prevailing winds are north-westerly with a mean speed of 6 knots.

Although Quantico's weather is sometimes influenced by a passing tropical disturbance, it is rare that extensive damage occurs from these.

QUANTICO, VIRGINIA



AD-A076 976

NAVAL OCEANOGRAPHY COMMAND DETACHMENT ASHEVILLE NC F/G 4/2  
U.S. NAVY AND MARINE CORPS METEOROLOGICAL STATION CLIMATIC SUMM--ETC(U)  
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# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

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Temperatures are normally 2-3 degrees F. higher than outlying areas due to the influence of the Potomac River. Snowfall amounts are particularly influenced by the higher temperatures, with differences of 2-3 inches occurring within ½ mile west of the field. The mean annual snowfall is 16 inches, but the rapid melt-off results in small accumulations. More than 10 inch accumulations are rare. The mean snow depth for the months of December through March (when over 92% of the snowfall occurs) is 3 inches, 4 inches, 4 inches, and 1 inch, respectively.

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Summers are warm and humid and winters mild. During spring and autumn, generally pleasant weather prevails. Coldest weather occurs during January and February. The warmest weather occurs in late July and early August. The annual mean temperature is 57 degrees F. Temperature extremes range from - 5.0 to 105.0 degrees F. Mean relative humidity is 69%.

The visibility remains greater than 3 miles and the ceiling above 1,000 feet 90% of the time. The prevailing winds are north-westerly with a mean speed of 6 knots.

Although Quantico's weather is sometimes influenced by a passing tropical disturbance, it is rare that extensive damage occurs from these.

QUANTICO, VIRGINIA



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1964	1.04	1.11 <sup>P</sup>	1.50	1.41	1.27	1.21	1.25	1.72	2.79	2.21	2.20	2.89	1.8
1965	1.41	1.78	2.42	2.24	2.22	2.22	2.25	2.68	2.42	2.21	2.21	1.97	1.8
1966	1.56	1.92	2.52	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1.8
1967	1.56	1.92	2.52	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1.8
1968	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1969	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1970	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1971	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1972	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1973	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1974	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1975	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1976	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1977	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1978	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1979	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1980	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1981	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1982	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1983	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1984	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1985	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1986	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1987	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1988	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1989	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1990	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1991	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1992	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1993	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1994	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1995	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1996	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1997	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1998	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
1999	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2000	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2001	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2002	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2003	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2004	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2005	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2006	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2007	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2008	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2009	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2010	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2011	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2012	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2013	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2014	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2015	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2016	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2017	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2018	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2019	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2020	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2021	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2022	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2023	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2024	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2025	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2026	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2027	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2028	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2029	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2030	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2031	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2032	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2033	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2034	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2035	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2036	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2037	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2038	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2039	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2040	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2041	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2042	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2043	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2044	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2045	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2046	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2047	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2048	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2049	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2050	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2051	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2052	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2053	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2054	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2055	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2056	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2057	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2058	2.01	2.74	3.69	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	3.48	2.0
2059	2.01	2.74	3.6										

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1894			42	22	29	232	277	246	0	0	2	0	1,046
1895	H	0	0	23	29	216	218	121	20	0	11	0	1,014
1896	0	0	0	25	129	1	520	1	1	0	0	0	1,014
1897	0	0	2	27	26	270	279	102	1	0	0	0	1,000
1898	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1899	2	0	0	29	26	270	279	102	1	0	0	0	1,000
1900	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1901	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1902	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1903	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1904	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1905	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1906	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1907	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1908	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1909	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1910	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1911	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1912	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1913	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1914	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1915	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1916	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1917	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1918	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1919	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1920	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1921	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1922	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1923	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1924	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1925	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1926	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1927	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1928	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1929	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1930	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1931	0	0	0	29	26	270	279	102	1	0	0	0	1,000
1932	0	0	0	29	26	270	279	102	1	0	0	0	1,000

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1964	28.2	28.2	28.2	28.0	28.2	28.1	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1965	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1966	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1967	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1968	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1969	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1970	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1971	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1972	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1973	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1974	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1975	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1976	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1977	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1978	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1979	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1980	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1981	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1982	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1983	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1984	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1985	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1986	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1987	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1988	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1989	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1990	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1991	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1992	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1993	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1994	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1995	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1996	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1997	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1998	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
1999	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2000	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2001	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2002	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2003	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2004	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2005	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2006	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2007	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2008	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2009	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2010	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2011	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2012	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2013	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2014	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2015	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2016	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2017	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2018	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2019	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2020	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2021	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2022	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2023	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2024	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2025	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2026	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2027	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2028	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2029	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2030	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2031	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2032	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2033	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2034	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2035	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2036	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2037	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2038	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2039	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2040	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2041	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2042	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2043	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2044	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2045	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2046	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2047	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2048	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2049	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2050	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2051	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2052	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2053	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2054	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2055	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2056	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2057	28.4	28.4	28.4	28.2	28.2	28.2	28.4	28.2	28.2	28.4	27.4	28.2	28.2
2058	28.4	28.4	28.4	28.2	28.2	28.2	28.4						

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
44-45	0	0	16	357	312	1013	H	744	382	254	100	28	
45-46	0	0	20	171	413	748	H	971	928	H	H	7	
46-47	0	0	21	313	443	776	710	937	651	314	84	4	
47-48	0	0	51	313	443	776	710	937	651	314	84	4	
48-49	0	0	67	471	398	740	754	757	722	357	94	3	
49-50	0	0	20	146	474	744	716	753	465	275	H	3	
50-51	0	0	29	188	398	594	676	695	597	288	120	12	4104
51-52	0	0	40	29	174	754	744	707	615	427	203	135	4302
52-53	0	0	11	223	420	682	337	722	494	158	33	18	4230
53-54	0	0	89	148	357	926	1000	955	959	243	73	24	4012
54-55	0	2	58	352	509	767	946	445	375	370	62	3	4794
55-56	0	0	27	251	488	1016	931	744	423	222	H	6	H
56-57	0	0	35	H	385	749	832	768	630	235	150	2	H
57-58	0	0	24	142	431	139	121	856	451	305	75	0	4215
58-59	0	0	81	198	397	997	1013	997	532	302	92	0	4743
59-60	0	0	77	149	488	1076	914	937	511	212	38	4	4403
60-61	0	1	38	367	451	754	967	623	376	20	23	4667	
61-62	0	0	59	497	511	713	745	709	334	222	133	33	4333
62-63	0	0	29	182	509	803	1000	955	959	243	73	24	4012
63-64	0	0	46	177	490	728	1003	918	480	223	104	0	4536
64-65	0	0	40	299	680	1093	937	762	480	224	59	0	4215
65-66	0	0	31	351	559	939	1089	779	710	287	77	0	4466
66-67	0	0	35	182	509	803	1000	955	959	243	73	24	4012
67-68	0	0	17	313	549	641	779	794	444	266	99	16	4442
68-69	0	0	17	313	549	641	779	794	444	266	99	16	4442
69-70	0	0	17	146	447	780	722	704	513	226	93	0	3661
70-71	0	0	45	392	475	726	797	846	433	373	39	0	4036
71-72	0	0	29	182	509	803	1000	955	959	243	73	24	4012
72-73	0	0	31	351	559	939	1089	779	710	287	77	0	4466
73-74	0	0	17	146	447	780	722	704	513	226	93	0	3661
74-75	0	0	45	392	475	726	797	846	433	373	39	0	4036
75-76	0	0	29	182	509	803	1000	955	959	243	73	24	4012
76-77	0	0	31	351	559	939	1089	779	710	287	77	0	4466

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "p" denotes partial record, i.e. less than 10 days record missing.



STATION NO OR SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
13773		Quantico, Virginia		38°30'N		77°18'W		11		KNYG			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather office, southeast corner hangar #2105	MCAS	1948	1969	38°30'N	77°18'W	14						
NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE							
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND								
1.	Installed	Atop control tower	UMQ-5		59.6'	1. Barometer, aneroid 2. Barograph (ML-3) 3. Semi-auto met sta (AN/GMQ-14) 4. Cloud height set (AN/GMQ-13B) 5. Theodolite (ML-247) 6. Transmissometer (AN/GMQ-10C)							
2.	1958	500' west of runway 02/20	"	RD-108	14.0'								

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Puerto Rico is a tropical hilly island which lies directly in the path of the easterly trade winds throughout the year. The island is the easternmost and smallest of the Greater Antilles. It lies about 1000 miles east-southeast of Miami, Florida. North of the island lies the Atlantic Ocean, while the southern coast is bounded by the Caribbean Sea. From its easternmost to its westernmost tips it is about 109 miles, and about 40 miles north-south. The overall area is slightly larger than the states of Delaware and Rhode Island combined.

In addition to the main island, Puerto Rico also embraces 3 secondary and a number of smaller islands. The island of Puerto Rico has 4 main land regions: the central mountains, the foothills, the coastal valleys, and the coastal lowlands. Extending to the east and west coast from inland elevations are the coastal valleys. Naval Station Roosevelt Roads is located in such a valley on the eastern coast of the island.

The climate of Puerto Rico is largely governed by warm, moist northeast tradewinds. Due to this stabilizing maritime influence, deviations from seasonal patterns are seldom experienced to any marked degree. During the summer, local winds are mainly east to southeast and become east to northeast in the winter. Except for tropical cyclones, departures from this stable pattern

are mainly due to easterly waves. The land and sea breeze effect is important in most coastal areas, but it is not as noticeable at places farther in the interior.

Temperature is the most stable element, with greatest annual mean monthly range being 5 degrees F. The monthly mean highs fall between 83 degrees F. to 88 degrees F. at Roosevelt Roads.

Rainfall in Puerto Rico varies markedly from place to place over relatively short distances. The majority of all Puerto Rico's rainfall consists of brief showers which are orographic in nature. There are two rainfall-producing mechanisms in Puerto Rico: easterly waves and cold fronts. During the period from May through November, Puerto Rico experiences easterly waves.

Tropical storms and hurricanes develop in the easterly waves and may cause torrential rains on Puerto Rico. The other major rainfall-producing situation occurs during the winter months, generally from about November to April. Occasionally during this period, the trailing edge of a cold front penetrates far enough south to have a definite effect upon Puerto Rico's rainfall. The distribution of rainfall over the year shows a relatively dry season and a relatively wet season. The summer season is the relatively wet season.

**ROOSEVELT ROADS, PUERTO RICO**



STN LTRS: MJNR  
WDAN # : 11630  
WMO # : 78535

MEAN NUMBER OF DAYS OCCURRENCE OF

MEAN NUMBER OF DAYS OCCURRENCE OF I

[illegible]

REMARKS: #DATA NOT AVAILABLE. # LESS THAN 0.30DAY/0.5 OR 0.05 INCH, OR 0.5 PERCENT AS APPLICABLE. THE VALUE LISTED UNDER PRESS ALT PRTY 99.958" INDICATES IT IS EXCEEDED ONLY 0.05% OF THE TIME. EYR MEANS EQUIVALENT YEARS OF RECORD (I.E. THE ACTUAL NUMBER OF YEARS UTILIZED IN THE COMPUTATIONS FROM THE OVERALL PERIOD OF RECORD, POH).

FLYING HGA & HRS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	02	02	02	02	02	02	02	02	02	02	02	02	02	02
LESS 5000	23	24	24	24	25	25	25	25	25	25	25	25	25	25
PT AND/OR	05	23	22	20	25	24	20	18	17	19	20	22	22	23
VISIBILITY	08	21	25	29	33	28	26	23	18	19	19	21	24	23
LESS 5 MI	11	20	21	23	25	19	18	17	19	19	21	22	21	23
	14	24	20	23	24	22	20	21	18	18	21	24	22	23
	17	20	22	27	25	22	23	21	18	19	20	20	21	23
	20	21	21	22	24	19	19	19	18	18	20	21	20	23
	23	21	21	23	25	17	23	16	17	15	20	21	21	23
ALL HRS	22	22	22	24	26	22	22	19	18	18	19	22	21	23
CEILING	02	3	5	5	3	2	2	1	2	3	2	2	3	23
LESS 1000	05	3	4	4	3	2	2	1	2	2	2	2	2	23
PT AND/OR	08	3	4	4	3	3	3	3	3	2	3	3	3	23
VISIBILITY	11	3	4	5	3	3	3	3	3	4	4	4	4	23
LESS 5 MI	14	4	5	6	5	3	2	2	4	4	3	4	4	23
	17	4	6	6	5	2	2	2	4	4	3	3	3	23
	20	4	5	5	3	2	2	2	4	4	3	2	3	23
	23	4	5	5	3	2	2	1	2	3	2	2	3	23
ALL HRS	2	4	5	5	4	2	2	2	3	3	3	3	3	23
CEILING	02	3	4	4	2	2	2	1	2	2	2	2	2	23
LESS 500	05	3	4	4	3	3	3	1	2	2	2	2	2	23
PT AND/OR	08	3	4	4	3	3	3	2	2	2	2	2	2	23
VISIBILITY	11	3	4	5	4	3	3	3	3	3	3	3	3	23
LESS 1 MI	14	4	5	5	3	2	2	2	3	3	4	4	4	23
	17	4	6	5	3	2	2	2	3	3	4	4	4	23
	20	4	5	5	3	2	2	2	2	2	2	2	2	23
	23	4	5	5	3	2	2	1	2	3	2	2	2	23
ALL HRS	2	4	5	5	3	2	2	2	2	2	2	2	2	23
CEILING	02	3	4	4	2	2	2	1	2	2	2	2	2	23
LESS 100	05	3	4	4	3	3	3	2	2	2	2	2	2	23
PT AND/OR	08	3	4	4	3	3	3	3	3	3	3	3	3	23
VISIBILITY	11	3	4	5	4	3	3	3	3	3	3	3	3	23
LESS 1/4 MI	14	4	5	5	3	2	2	2	3	3	4	4	4	23
	17	4	6	5	3									



## TOTAL PRECIPITATION INCHES

Year	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept.	Oct	Nov	Dec	Annual
1908	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1909	2.70	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1910	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1911	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1912	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1913	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1914	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1915	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1916	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1917	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1918	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1919	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1920	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1921	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1922	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1923	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1924	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1925	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1926	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1927	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1928	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1929	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1930	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1931	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1932	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1933	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1934	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1935	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1936	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1937	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1938	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42
1939	2.06	2.09	1.29	0.97	0.11	2.77	3.27	7.70	7.82	11.49	2.99	60.42

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1894	316	323	348	369	478	547	587	589	518	490	448	318	5021
1895	316	328	348	369	478	547	587	589	518	490	448	318	5021
1896	316	328	348	369	478	547	587	589	518	490	448	318	5021
1897	316	328	348	369	478	547	587	589	518	490	448	318	5021
1898	316	328	348	369	478	547	587	589	518	490	448	318	5021
1899	316	328	348	369	478	547	587	589	518	490	448	318	5021
1900	316	328	348	369	478	547	587	589	518	490	448	318	5021
1901	316	328	348	369	478	547	587	589	518	490	448	318	5021
1902	316	328	348	369	478	547	587	589	518	490	448	318	5021
1903	316	328	348	369	478	547	587	589	518	490	448	318	5021
1904	316	328	348	369	478	547	587	589	518	490	448	318	5021
1905	316	328	348	369	478	547	587	589	518	490	448	318	5021
1906	316	328	348	369	478	547	587	589	518	490	448	318	5021
1907	316	328	348	369	478	547	587	589	518	490	448	318	5021
1908	316	328	348	369	478	547	587	589	518	490	448	318	5021
1909	316	328	348	369	478	547	587	589	518	490	448	318	5021
1910	316	328	348	369	478	547	587	589	518	490	448	318	5021
1911	316	328	348	369	478	547	587	589	518	490	448	318	5021
1912	316	328	348	369	478	547	587	589	518	490	448	318	5021
1913	316	328	348	369	478	547	587	589	518	490	448	318	5021
1914	316	328	348	369	478	547	587	589	518	490	448	318	5021
1915	316	328	348	369	478	547	587	589	518	490	448	318	5021
1916	316	328	348	369	478	547	587	589	518	490	448	318	5021
1917	316	328	348	369	478	547	587	589	518	490	448	318	5021
1918	316	328	348	369	478	547	587	589	518	490	448	318	5021
1919	316	328	348	369	478	547	587	589	518	490	448	318	5021
1920	316	328	348	369	478	547	587	589	518	490	448	318	5021
1921	316	328	348	369	478	547	587	589	518	490	448	318	5021
1922	316	328	348	369	478	547	587	589	518	490	448	318	5021
1923	316	328	348	369	478	547	587	589	518	490	448	318	5021
1924	316	328	348	369	478	547	587	589	518	490	448	318	5021
1925	316	328	348	369	478	547	587	589	518	490	448	318	5021
1926	316	328	348	369	478	547	587	589	518	490	448	318	5021
1927	316	328	348	369	478	547	587						

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1940	74.4	72.0	70.5	70.7	80.2	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1941	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1942	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1943	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1944	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1945	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1946	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1947	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1948	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1949	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1950	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1951	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1952	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1953	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1954	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1955	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1956	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1957	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1958	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1959	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1960	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1961	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1962	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1963	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1964	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1965	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1966	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1967	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1968	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1969	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7
1970	74.5	72.5	71.0	70.4	80.1	85.0	88.0	83.0	81.5	80.5	79.0	78.5	79.7

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
11630		Roosevelt Roads, P.R.		18°15'N		65°38'W		39		MJNR		78535	
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF STATION LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Unknown	Navy			18°15'N	65°38'W	66.7	Unknown					
2.	Aerological Office	"		1959	"	"	33	Mercurial					
3.	Meteorological office ops bldg	"	1959	1963	"	"	37	"					
4.	" " " "	"	1963	1964	"	"	33	"					
5.	South bulkhead of met. office	"	1964	1977	"	"	36	"					
6.	Central partition of met office	"	1977		"	"	36	"					
1a.	AN/GMQ-14A console	"	1965	1975	"	"	38	Aneroid					
2a.	AN/GMQ-29 auto met station	"	1975		"	"	38	"					

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Prior	Control tower	PMQ-3		90' MSL	1. Barograph (marine)
2.	1960	Roof of ops tower	Unknown		87' MSL	2. Auto met station (AN/GMQ-29)
3.	1960	300' SE of the edge of runway 06-24 near east end of airfield	AN/UMQ-5	RD-108B	Unknown	3. Ceiling light (ML-121-D)
4.	1963	Extended mast	"	"	28' MSL	4. Theodolite (Aero 1937 USN)
5.	1971	450' E of operations building	"	"	41' MSL	5. Radar (FPS-106)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

U.S. Fleet Weather Central Rota is located on the Naval Base, Rota, Spain, along the northern shore of the Bay of Cadiz approximately 60 miles northwest of Gibraltar.

Rota has a mediterranean/subtropical dry climate, characterized by hot, dry summers and rainy, cool winters. Maritime influences play an important role in the local climate as evidenced by the relatively narrow mean annual temperature range. Yet, continental influences are evidenced by an absolute annual temperature range of over 80 degrees F.

During the winter season (Nov-Mar) most of the rainfall is recorded. Cloudiness and low visibilities are at a maximum, but even so, a third of the days are sunny with clear, cool nights. Prevailing winds are from easterly quadrants, but the highest winds are usually from the west during passage of Atlantic frontal systems. Thunderstorms occur most frequently at night or early morning during and following passage of these frontal systems. Freezing temperatures are rare and occur only on clear mornings, and temperatures rise to well above freezing by mid-day. Snowfall is extremely rare.

The spring transition period (Apr-May) is marked by a sharp increase in cloudiness, precipitation and a wider diurnal temperature range. Afternoon sea breezes become common.

Summer is the dry season. June's rain averages less than an inch, and rain is scarce to nonexistent in July and August. The prevailing winds are west to southwest sea breezes. Unpleasant weather is generally limited to Levantes. A Levante is a local southeast wind resulting from funneling through the Strait of Gibraltar. Its dryness and gustiness interrupt the normal sea breeze. Levantes occur most frequently in summer and can last up to two weeks. The prevailing summer sea breeze generally limits maximum temperatures to the mid 80's. Temperatures reach the low 90's during Levantes and can exceed 100 degrees F. on days with northeast winds.

The autumn transition period (Sep-Oct) marks the beginning of the rainy season. Summery weather can last unbroken well into October, but more commonly significant rains begin in late September. Cloudiness increases markedly and by late October the occurrence of heavy morning fogs is significant.

**ROTA, SPAIN**



STN LTRS: LERY  
WBAN # : 13025  
WMD # : 08449

\* DATA NOT AVAILABLE. # LESS THAN .05% OR .05 INCH, OR 0.9 SECOND AS APPLICABLE. THE TIME.  
THE VALUE LISTED UNDER "PRESS ALT F9-9-58X" INDICATES IT IS EXCEEDED ONLY 0.05 OF  
EVERY MEANS EQUIVALENT YEARS OF RECORD (I.E., THE ACTUAL NUMBER UP YEARS UTILIZED IN THE  
OVERALL PERIOD OF RECORD, MINUS ONE).  
COMPUTATIONS FROM "MR

[illegible]



## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1898	N	N	N	N	N	N	N	N	N	N	N	N	N
1899	2.02	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1900	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1901	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1902	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1903	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1904	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1905	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1906	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1907	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1908	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1909	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1910	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1911	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1912	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1913	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1914	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1915	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1916	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1917	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1918	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1919	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1920	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1921	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1922	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1923	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1924	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1925	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1926	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1927	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1928	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1929	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1930	1.98	1.23	1.41	1.49	1.67	.62	.75	.14	.11	.93	2.48	.88	1.82
1931	1.98	1.23	1.41	1.49	1.67	.62	.75						

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1938	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1939	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1940	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1941	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1942	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1943	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1944	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1945	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1946	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1947	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1948	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1949	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1950	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1951	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1952	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1953	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1954	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1955	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1956	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1957	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1958	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1959	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1960	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1961	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1962	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1963	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1964	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1965	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1966	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1967	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1968	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1969	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
1970	35.6	32.9	37.2	40.2	42.8	40.1	37.8	35.0	32.5	30.0	28.2	26.4	34.4
MEAN	35.1	32.4	36.5	39.5	42.0	39.8	37.5	34.8	32.3	29.8	28.0	26.2	33.2

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1768-69	0	0	0	12	199	240	270	335	337	137	54	4	1566
1769-70	0	0	0	45	199	296	401	321	320	97	29	0	1566
1770-71	0	0	0	45	199	296	401	321	320	97	29	0	1566
1771-72	0	0	0	45	201	318	540	314	335	101	37	2	1443
1772-73	0	0	0	12	179	374	361	334	320	145	34	2	1434
1773-74	0	0	0	2	179	430	401	344	328	145	0	1	1577
1774-75	0	0	0	28	216	430	401	344	328	64	7	0	1749
1775-76	0	0	0	0	216	430	401	344	328	64	7	0	1749
1776-77	0	0	0	0	216	430	401	344	328	64	7	0	1749
1777-78	0	0	0	0	216	430	401	344	328	64	7	0	1749
1778-79	0	0	0	0	216	430	401	344	328	64	7	0	1749
1779-80	0	0	0	0	216	430	401	344	328	64	7	0	1749
1780-81	0	0	0	0	216	430	401	344	328	64	7	0	1749
1781-82	0	0	0	0	216	430	401	344	328	64	7	0	1749
1782-83	0	0	0	0	216	430	401	344	328	64	7	0	1749
1783-84	0	0	0	0	216	430	401	344	328	64	7	0	1749
1784-85	0	0	0	0	216	430	401	344	328	64	7	0	1749
1785-86	0	0	0	0	216	430	401	344	328	64	7	0	1749
1786-87	0	0	0	0	216	430	401	344	328	64	7	0	1749
1787-88	0	0	0	0	216	430	401	344	328	64	7	0	1749
1788-89	0	0	0	0	216	430	401	344	328	64	7	0	1749
1789-90	0	0	0	0	216	430	401	344	328	64	7	0	1749
1790-91	0	0	0	0	216	430	401	344	328	64	7	0	1749
1791-92	0	0	0	0	216	430	401	344	328	64	7	0	1749
1792-93	0	0	0	0	216	430	401	344	328	64	7	0	1749
1793-94	0	0	0	0	216	430	401	344	328	64	7	0	1749
1794-95	0	0	0	0	216	430	401	344	328	64	7	0	1749
1795-96	0	0	0	0	216	430	401	344	328	64	7	0	1749
1796-97	0	0	0	0	216	430	401	344	328	64	7	0	1749
1797-98	0	0	0	0	216	430	401	344	328	64	7	0	1749
1798-99	0	0	0	0	216	430	401	344	328	64	7	0	1749
1799-00	0	0	0	0	216	430	401	344	328	64	7	0	1749
1800-01	0	0	0	0	216	430	401	344	328	64	7	0	1749
1801-02	0	0	0	0	216	430	401	344	328	64	7	0	1749
1802-03	0	0	0	0	216	430	401	344	328	64	7	0	1749
1803-04	0	0	0	0	216	430	401	344	328	64	7	0	1749
1804-05													

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**ROTA, SPAIN**



STATION NO. OR SUMMARY:		STATION NAME:		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN:		WMO NUMBER:	
13025		Rota, Spain		36°39'N		06°21'W		86		LERT		08449	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BAROQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	South bulkhead in weather clearance office	Navy	1958	1966	36°39'N	06°21'W	88	Mercurial	24				
2.	North bulkhead in weather clearance office	"	1966	1970	"	"	99	"	24				
3.	West bulkhead in weather clearance office	"	1971	1973	"	"	99	"	24				
1a.	North bulkhead in weather clearance office	"	1966	1969	"	"	101	Aneroid	24				
2a.	West bulkhead in weather clearance office	"	1969		"	"	101	"	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	1959	645 feet south of the runway centerline and near the mid point between taxiway and parking apron	UMQ-5	RD-108	15'
2.	1977	750 feet north of the runway centerline and 900 feet east of the TACAN trailer	"	AN/GMQ-29	15'

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

San Clemente Island is the southernmost island of the "Channel Islands". It is situated about 75 miles west-northwest of San Diego and 54 miles south-southwest of Long Beach, California.

The island stretches northwest to southeast for 26 miles, and is approximately 7 miles wide. The eastern side, toward the California coast, plunges sharply into the ocean in vertical lava cliffs. The western side is less steep.

The climate of San Clemente Island is distinctly maritime, featuring cool summers and mild winters. High humidities are experienced throughout the year with an annual average of 80%. No temperatures below freezing have ever been recorded at the location of the weather station but atop the higher points of the island such temperatures likely have occurred.

Temperatures above 90 degrees F. are a rarity, but occasionally when Santa Ana conditions prevail in August through October temperatures exceeding 90 degrees and even 100 degrees F. have been recorded. Fortunately, when such high temperatures occur the relative humidity values are quite low, generally less than 25%.

One of the outstanding features of the climate is the small range in average temperature, both diurnal and seasonal. For example, the mean temperature in the winter months is just 10 degrees F. lower than the mean temperatures of the summer months. The daily temperature ranges are about 10 degrees F. also.

Stormy winds and gales are infrequent on San Clemente island at lower elevations. Atop the higher regions of the island gale force winds are more common. The average wind speeds for all months are under 10 knots at the airfield. The predominate wind direction is from the west in all months, with short periods of northerly to easterly winds associated with Santa Ana conditions. The highest wind on record is WNW - 45 knots in April 1976.

Annual precipitation averages between 5 and 8 inches. The wettest months are November through March and the driest from June through September. Snowfall is a rarity on the island with a trace noted once in November and also in December. Occasionally small hail will accompany the passage of a more vigorous cold front.

The cloudiest period is in the spring and summer months when the air is more stable. June and July are the foggiest months. Low clouds and fog are not infrequent in the winter months, but the percentage of occurrence is lower due to increased winds associated with the passage of westerly disturbances. On most days the low clouds will "burn off" by late morning.

Thunderstorms are infrequent with only 1 or 2 normally experienced per year. Occasionally air mass thunderstorms drift up from the south in connection with tropical storm activity along the west coast of Mexico. Except during periods of low clouds and fog, visibilities are generally quite good with surrounding islands frequently visible and periodically the mainland itself is visible.

SAN CLEMENTE ISLAND, CALIFORNIA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: SAN CLEMENTE, CALIFORNIA  
LOCATION: N33 01 W118 55

PERIOD: APR 63-DEC 77  
ELEV: 108

STN LTRS: KNUC  
BRAN # 1 03117  
WMO # 1

TEMPERATURE DEG F										PRECIPITATION INCHES										SNOWFALL RELATIVE HUM										DEW PRESS SFC WINDS										MEAN PRECIP										MEAN NUMBER OF DAYS										OCCURRENCE OF 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STATION NO ON SUMMARY:		STATION NAME:		LATITUDE:		LONGITUDE:		STATION ELEV. (FT.)		CALL SIGN:		WIND NUMBER:	
93117		San Clemente Island, California		33°01'N		118°35'W		168		KNUC			
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	Navy	1960	1961	33°01'N	118°35'W	175	Mercurial	Var				
2.	*Weather service office	"	1962	1966	"	"	168	"	"				
3.	Weather service office, bldg 60001	"	1966		"	"	**170	"	24				
1a.	Weather service office	"	1966		"	"	173	Aneroid	24				
* Aneroid barometer in use part of 1962. Mercurial being repaired.													
** Resurveyed height.													
SURFACE WIND EQUIPMENT INFORMATION										REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE			
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND								
1.	Installed 1960	100 yards east of weather office	AN/UMQ-5	RD-108									
2.	1962	900 feet north of building 60001	"	"	17'								
1. Barograph (marine) 2. Semi-auto met station (GMQ-14B) 3. Ceiling light (ML-121) 4. Cloud height set (GMQ-13) 5. Theodolite (ML-474-GM) 6. Transmissometer (GMQ-10)													

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Station North Island, San Diego, California is located on a peninsula approximately 2 miles southwest of the city of San Diego and shares an island-like land mass with the city of Coronado. The prevailing winds and weather are tempered by the Pacific Ocean, with the result that summers are cool and winters are warm in comparison with other places along the same latitude. This causes unusually small daily temperature ranges; averaging about 12 degrees F. between the highest and lowest readings, while just a few miles inland these ranges increase to above 30 degrees F. During early fall and lasting into early winter, the hot dry "Santa Ana" winds that blow from the northeast increase in frequency. These Foehn type winds last up to 4 days, and sometimes raise temperatures above 90 degrees F. at North Island.

North Island experiences an average annual rainfall of less than 9 inches. The local climate is best described as semi-arid. Mountainous terrain to the east receives considerably more precipitation than does the coastal strip.

Hazardous or destructive weather is practically nonexistent at North Island although infrequent

waterspouts, funnel clouds, and tornadoes have been reported in the vicinity of the station during the winter months. These phenomena have always been observed during active cold frontal passages. Thunderstorms are rare, averaging about 3 a year over North Island. Strong winds and gales are infrequent and velocities over 35 mph occur about twice each year on the average.

Considerable fog occurs along the coast but the amount decreases with distance inland. The post "Santa Ana" fogs of the fall and winter months are usually the most frequent and an average of 10 to 12 days of fog each month will occur during the September to December period. When fog is the only phenomena present, clearing is very rapid; usually one or two hours after sunrise.

Visibilities are generally good, but are sometimes restricted during periods of little or no horizontal movement of air. Frequent widespread subsidence combined with the high population and high concentration of industry in Southern California are largely responsible for these hazy days.

SAN DIEGO, CALIFORNIA



PREPARED BY: NWSD ASHEVILLE JUNE 1978 STATION NAME: SAN DIEGO, CALIFORNIA LOCATION: 1 N32 42 W117 12 PERIOD: APR 45-DEC 77 ELEV: 1 STN LTRSI: KNUZ MBAN #: 1 93112 WMO #: 1

TEMPERATURE DEG. F.										PRECIPITATION INCHES										SNOWFALL RELATIVE HUM.										VAPOR										MEAN NUMBER OF DAYS										OCCURRENCE OF PI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1944	1.18	1.54	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1945	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1946	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1947	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1948	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1949	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1950	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1951	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1952	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1953	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1954	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1955	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1956	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1957	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1958	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1959	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1960	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1961	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1962	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1963	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1964	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1965	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1966	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1967	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1968	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1969	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1970	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1971	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1972	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1973	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1974	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1.02	Y	1.52	1.39	1.26
1975	1.26	1.59	1.32	1.15	1.01	1.09	Y	1.39	1				

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE °F

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904	11	11	11	17	0	1	1	79.2	59	32	25	20	47
1905	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1906	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1907	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1908	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1909	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1910	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1911	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1912	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1913	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1914	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1915	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1916	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1917	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1918	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1919	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1920	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1921	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1922	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1923	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1924	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1925	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1926	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1927	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1928	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1929	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1930	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1931	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1932	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1933	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1934	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1935	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1936	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1937	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1938	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1939	10	10	10	10	10	10	10	79.2	59	32	25	20	47
1940	10	10	10	10	10	10	10	79.2	59	32	25	20	47

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
18-19	3	0	2	12	180	H	299	325	372	529	560	58	
19-20	3	0	0	0	211	276	363	337	354	108	47	2	1920
20-21	3	0	0	0	170	349	399	346	312	130	114	6	1770
21-22	11	2	13	H	170	349	328	288	312	130	114	6	
22-23	1	0	0	7	340	21	246	246	246	246	246	246	H
23-24	1	0	0	16	144	340	239	239	239	171	52	20	H
24-25	1	0	0	34	340	340	340	340	340	340	340	340	H
25-26	1	0	0	34	340	340	340	340	340	340	340	340	H
26-27	1	0	0	34	340	340	340	340	340	340	340	340	H
27-28	1	0	0	34	340	340	340	340	340	340	340	340	H
28-29	1	0	0	34	340	340	340	340	340	340	340	340	H
29-30	1	0	0	34	340	340	340	340	340	340	340	340	H
30-31	1	0	0	34	340	340	340	340	340	340	340	340	H
31-32	1	0	0	34	340	340	340	340	340	340	340	340	H
32-33	1	0	0	34	340	340	340	340	340	340	340	340	H
33-34	1	0	0	34	340	340	340	340	340	340	340	340	H
34-35	1	0	0	34	340	340	340	340	340	340	340	340	H
35-36	1	0	0	34	340	340	340	340	340	340	340	340	H
36-37	1	0	0	34	340	340	340	340	340	340	340	340	H
37-38	1	0	0	34	340	340	340	340	340	340	340	340	H
38-39	1	0	0	34	340	340	340	340	340	340	340	340	H
39-40	1	0	0	34	340	340	340	340	340	340	340	340	H
40-41	1	0	0	34	340	340	340	340	340	340	340	340	H
41-42	1	0	0	34	340	340	340	340	340	340	340	340	H
42-43	1	0	0	34	340	340	340	340	340	340	340	340	H
43-44	1	0	0	34	340	340	340	340	340	340	340	340	H
44-45	1	0	0	34	340	340	340	340	340	340	340	340	H
45-46	1	0	0	34	340	340	340	340	340	340	340	340	H
46-47	1	0	0	34	340	340	340	340	340	340	340	340	H
47-48	1	0	0	34	340	340	340	340	340	340	340	340	H
48-49	1	0	0	34	340	340	340	340	340	340	340	340	H
49-50	1	0	0	34	340	340	340	340	340	340	340	340	H
50-51	1	0	0	34	340	340	340	340	340	340	340	340	H
51-52	1	0	0	34	340	340	340	340	340	340	340	340	H
52-53	1	0	0	34	340	340	340	340	340	340	340	340	H
53-54	1	0	0	34	340	340	340	340	340	340	340	340	H
54-55	1	0	0	34	34								

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO. OR SUMMARY: 93112		STATION NAME: San Diego, California		LATITUDE: 32°42'N		LONGITUDE: 117°12'W		STATION ELEV. (FT): 24		CALL SIGN: KNZY		WMO NUMBER:	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Naval Weather Service Facility, second deck, bldg 516, ops bldg	Navy	1944		32°42'N	117° 12'W	48	Mercurial	24				
1a.	Naval Weather Service Facility	"	1960		"	"	50	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed 1944	Atop operations building	Selsyn	Triple	87'MSL	1. Barograph (3835-672) 2. Semi auto met station (AN/GMQ-14) 3. Cloud height set (AN/GMQ-13B) 4. Transmissometer (GMQ-10C) 5. Wave spectrum analyzer 6. Wave height recorder 7. Ceiling light (ML 121) 8. GOES 9. NAMFAX 10. NEDN
2.	1956	Atop operations building	AN/UMQ-5C	RD-108C	95'MSL	
3.	1960	1500' from east end and 700' from centerline of runway 29	AN/UMQ-5	RD-108	30'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

San Nicolas Island is one of the eight Channel Islands off the southern coast of California. It is located some 55 miles southwest of Point Mugu, and about 65 miles to the southwest of Los Angeles. It has a distinctly table-like profile, with a gentle slope upward from the northern end of the island. A sandspit, whose size and shape have varied through the years, marks the southeastern tip of the island.

The peak altitude of San Nicolas is 907 feet near the southern edge of the mesa. The airstrip is located near the southeastern edge of the mesa at a height of 502 feet above sea level. The weather station elevation is 504 feet MSL and frequently is within the subtropical inversion that affects the southern California weather patterns. Thus, temperature, humidity, sea level pressure, and other weather data from the weather station are not necessarily representative of surface conditions on the water.

Except for steady northwesterly winds and lower annual rainfall, San Nicolas Island experiences much the same general weather patterns as does Point Mugu.

The flying weather at San Nicolas Island is above Visual Flight Rule (VFR) minimums (1000-foot ceiling and 3-mile visibility) 78% of the time on a year-round basis.

The moderating effect of the surrounding ocean is seen in the small range of mean monthly temperatures. Daily maximum temperatures are near 70 degrees F. in the warmest months and near 60 degrees F. in the coolest months. Minimum temperatures generally vary from the upper 40's to the mid 50's through the year. Freezing temperatures have not been recorded. Several days with maxima over 100 degrees F. have occurred; the highest was 105 degrees F. in September of 1955.

The average seasonal precipitation is just under 7 inches with 71% of this amount falling from November through February. The summer months average less than 0.1 inch and most of what falls is drizzle from stratus clouds. The occurrence of thunderstorms, hail and funnel clouds is much the same as at Point Mugu - infrequent. Visibility restrictions however, are much more likely to be fog and haze, although the island may experience lowered visibility at times as a result of smog from the Los Angeles area.

SAN NICOLAS ISLAND, CALIFORNIA







## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE °F

[illegible]

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1944-45	87	72	59	59	H	H	H	H	H	223	270	176	H
1945-46	115	74	H	H	H	H	H	H	H	176	16	6	H
1946-47	134	123	H	H	H	H	H	261	427	H	289	197	H
1947-48	154	123	H	H	H	H	330	H	300	247	223	167	H
1948-49	H	116	97	178	115	340	347	353	343	H	227	H	H
1949-50	H	99	127	128	123	140	340	H	343	332	H	190	H
1950-51	132	110	97	H	140	343	H	303	12	H	H	H	H
1951-52	H	H	H	H	H	H	H	H	H	H	H	H	H
1952-53	H	H	H	H	H	H	H	H	H	H	H	H	H
1953-54	H	50	H	H	H	H	H	H	H	H	H	H	H
1954-55	H	H	H	H	H	H	H	H	H	H	H	H	H
1955-56	H	H	H	H	H	H	H	H	H	H	H	H	H
1956-57	H	H	H	H	H	H	H	H	H	H	H	H	H
1957-58	H	H	H	H	H	H	H	H	H	H	H	H	H
1958-59	H	32	H	H	H	H	H	H	H	H	H	H	H
1959-60	120	22	105	107	250	227	351	278	332	330	197	144	H
1960-61	99	44	H	H	179	316	369	349	H	H	H	116	H
1961-62	90	H	H	H	417	H	H	431	396	140	H	306	H
1962-63	91	11	H	H	130	330	301	304	230	230	142	H	H
1963-64	61	48	58	122	261	430	333	371	360	240	220	140	H
1964-65	49	49	108	152	143	299	351	323	346	340	137	115	H
1965-66	50	50	107	151	240	340	340	340	340	340	340	340	H
1966-67	97	16	31	171	H	437	434	363	H	347	215	113	H
1967-68	52	20	30	H	240	360	363	279	347	340	160	99	H
1968-69	96	51	60	107	240	270	351	364	344	344	H	189	H
1969-70	57	48	57	H	157	340	376	376	340	311	432	H	H
1970-71	H	23	H	139	231	H	H	H	H	370	H	170	H
1971-72	70	62	H	147	189	230	H	H	H	H	H	H	H
MEAN	89	62	64	111	200	331	376	369	343	280	215	162	3240

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO ON SUMMARY	STATION NAME	LATITUDE	LONGITUDE	STATION ELEV. (FT)	CALL SIGN	WMO NUMBER
93116	San Nicolas Island, California	33°15'N	119°27'W	504	KNSI	72291

## STATION LOCATION AND INSTRUMENTATION HISTORY

NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY
			FROM	TO			FEET	TYPE BAROMETER	
1.	Weather service office, ops bldg	USN	1946	1957	33°15'N	119°27'W	507	Tonnalot	Var
2.	" " " new ops bldg	"	1957	1966	"	"	"	"	"
3.	" " " bldg 121	"	1966		"	"	568	Fortin	"
1a.	Building 121	"	1966		"	"	570	Aneroid	

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	Atop catwalk on ops bldg	Selsyn	*Double register	38'	1. Barograph (ML-3D)
2.	1957	Atop control tower on new ops bldg	**Selsyn		72'	2. Semi auto met sta (AN/GMQ-14A)
1a.	1957	Mounted on Selsyn mast	AN/UMQ-5	RD-108	72'	3. Cloud height set (AN/GMQ-13C)
2a.	1963	2600' from end of runway 12, 775' from runway centerline on the southwest side	"	"	13'	4. Transmissometer (AN/GMQ-10)
						5. Radiosonde (AN/GMD-1B)
						6. Theodolite (ML-427)
						7. Auto met station (MOTOROLA)
3.	1976	2000' SE of end of runway 12, south west of taxiway	"	"	13'	* Decommissioned 1955. ** Disassembled 1957.

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Marine Corps Air Station (Helicopter) Santa Ana, California is located in the southwestern portion of California in an area known as the "Los Angeles Basin". The station is bounded on the north and east by extensions of the Coast Mountain Range and by the Pacific Ocean on the south and west. The Santa Ana Mountains to the east, have an average elevation of about 3,000 feet. Saddleback Peak rises to 5,496 feet at a distance of 17 miles from the station. It is the highest peak in the Santa Ana Mountains. The Pacific Ocean is 15 miles to the west of the station and 9 miles to the south.

The region in which the air station is located enjoys one of the most equable climates in North America. The summer season begins in April and lasts through October. During this period the Pacific High Pressure Area is the dominant weather feature. Fog and stratus cloudiness are common during this season. Stratus cloudiness and fog are advected over the area during the evening hours. It generally "burns off" during the late morning periods. The winter season covers the period November through March. Foehn or "Santa Ana" winds may occur during any season of the year, but are more predominant and much stronger in velocity during the winter period. The Santa Ana winds originate from cold high pressure areas centered over the high desert of California and Nevada. The air flows through the El Cajon and Banning Passes and then joins forces as it passes through the Santa Ana Canyon. The wind speed is increased by the Venturi effect as this process takes place. The

air is heated adiabatically through compression as it flows down into the basin. Temperature increases of 20 degrees are common. The wind direction during Santa Ana conditions varies from north through east, but the strongest velocities are experienced from a north-northeast direction.

The average annual precipitation for Santa Ana is 9.8 inches. December is the wettest month with an average mean monthly rainfall of 1.9 inches and July is the driest with only .02 inch. Thunderstorms are rare in this area. The station averages 4 to 5 per year.

Prevailing surface winds are westerly with an average velocity of 5 knots. The sea breeze is a predominant daily feature and very light drainage winds from the mountains occur at night.

Temperatures are generally mild. The annual average temperature is 62.0 degrees F. with an annual mean relative humidity of 72.8%.

Frontal activity in this area is generally mild. During the winter season the polar front occasionally passes the station. The fronts are usually accompanied by multi-layered cloudiness and scattered shower activity. Light to moderate icing conditions frequently occur as low as 1,500 feet in associated frontal cloudiness during the winter. Although frontal turbulence is generally light, the turbulence over the mountain ranges commonly becomes moderate to severe as the polar front flows over the mountain ridges.

**SANTA ANA, CALIFORNIA**



PREPARED BY NWSO ASHEVILLE  
JUNE 1978

STATION NAME: SANTA ANA, CALIFORNIA  
LOCATION 1 N33 42 W117 50

PERIOD: MAR 45 DEC 77  
ELEV 1

STN LTRSI KNTK  
WMO # 1 93114  
WMO # 1

TEMPERATURE DEG F		PRECIPITATION		INCHES		SNOWFALL		RELATIVE		DEW		PRESS		SFC		WINDS		MEAN PRECIP		AMT		INCHES		SNOWFALL		MT		Y		MAX		DEG		F		AND		MIN	
DAILY MEAN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN		MAX		MIN			
JAN 65		42		54		89		28		1.7		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6		1.6			
FEB 66		44		56		92		31		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
MAR 66		46		58		93		34		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
APR 66		48		60		94		36		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
MAY 66		50		62		95		38		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
JUN 66		52		64		96		40		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
JUL 66		54		66		97		42		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
AUG 66		56		68		98		44		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
SEP 66		58		70		99		46		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
OCT 66		60		72		100		48		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
NOV 66		62		74		101		50		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
DEC 66		64		76		102		52		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
JAN 67		66		78		103		54		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
FEB 67		68		80		104		56		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
MAR 67		70		82		105		58		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
APR 67		72		84		106		60		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
MAY 67		74		86		107		62		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
JUN 67		76		88		108		64		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
JUL 67		78		90		109		66		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
AUG 67		80		92		110		68		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
SEP 67		82		94		111		70		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
OCT 67		84		96		112		72		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4		1.4			
NOV 67		86		98		113		74		1.4		1.4		1.4		1.4																							



## TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1945	N	N	2.48	.61	T	T	T	2.4	.04	.88	.17	3.02	N
1946	N	.58	2.10	.54	T	T	T	1.65	.11	.28	.17	1.90	N
1947	.19	.24	.22	.12	.29	.02	.00	N	N	N	N	N	N
1948	N	N	.38	.12	N	N	N	N	N	N	N	N	N
1949	N	N	N	N	N	N	N	N	N	N	N	N	N
1950	N	N	N	N	N	N	N	N	N	N	N	N	N
1951	N	N	N	N	N	N	N	N	N	N	N	N	N
1952	N	N	N	N	.01	N	N	N	N	N	N	N	N
1953	N	N	N	N	N	N	N	N	N	N	N	N	N
1954	N	N	N	N	N	N	N	N	N	N	N	N	N
1955	N	N	N	N	N	N	N	N	N	N	N	N	N
1956	N	N	N	N	N	N	N	N	N	N	N	N	N
1957	N	N	N	N	N	N	N	N	N	N	N	N	N
1958	N	N	N	N	N	N	N	N	N	N	N	N	N
1959	N	N	N	N	N	N	N	N	N	N	N	N	N
1960	N	N	N	N	N	N	N	N	N	N	N	N	N
1961	N	N	N	N	N	N	N	N	N	N	N	N	N
1962	N	N	N	N	N	N	N	N	N	N	N	N	N
1963	N	N	N	N	N	N	N	N	N	N	N	N	N
1964	N	N	N	N	N	N	N	N	N	N	N	N	N
1965	N	N	N	N	N	N	N	N	N	N	N	N	N
1966	N	N	N	N	N	N	N	N	N	N	N	N	N
1967	N	N	1.58	.49	.05	T	.00	.00	.47	T	2.33	1.10	N
1968	.85	.59	1.28	.16	T	T	.12	.00	T	.31	.38	1.10	N
1969	6.61	7.22	.84	.97	.03	T	.04	.00	N	N	N	.039	N
1970	1.239	1.009	T	T	T	.03	T	.00	T	T	1.64	2.42	N
1971	.46	.16	.03	.04	.05	.00	.04	.05	T	T	.07	1.55	N
1972	T	.01	.11	.04	.09	.01	T	T	T	T	.03	1.65	N
1973	3.11	2.31	5.91	2.31	.04	.09	.01	T	T	T	.03	1.84	N
1974	4.06	2.91	.93	.12	.07	T	T	T	T	T	.41	.07	N
1975	.48	1.23	2.97	2.13	.12	T	T	T	T	T	.44	.37	N
1976	.22	1.10	1.15	.10	.46	T	T	T	T	T	.01	.00	N
1977	.00	2.28	1.10	1.25	.29	T	T	1.74	T	T	.01	.00	N
1978	2.65	1.09	.85	T	.39	.02	.18	T	T	T	.03	2.36	N
MEAN	1.75	1.64	1.44	.76	.28	.06	.02	.21	.35	.23	1.19	1.46	9.77

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
1864-65	0	1	13	37	237	371	371	410	435	321	171	39	22
1865-66	0	2	1	0	110	237	441	234	230	168	84	16	137
1866-67	0	0	0	0	0	0	0	0	0	0	0	0	0
1867-68	0	0	0	0	0	0	0	0	0	0	0	0	0
1868-69	0	0	0	0	0	0	0	0	0	0	0	0	0
1869-70	0	0	0	0	0	0	0	0	0	0	0	0	0
1870-71	0	0	0	0	0	0	0	0	0	0	0	0	0
1871-72	0	0	0	0	0	0	0	0	0	0	0	0	0
1872-73	0	0	0	0	0	0	0	0	0	0	0	0	0
1873-74	0	0	0	0	0	0	0	0	0	0	0	0	0
1874-75	0	0	0	0	0	0	0	0	0	0	0	0	0
1875-76	0	0	0	0	0	0	0	0	0	0	0	0	0
1876-77	0	0	0	0	0	0	0	0	0	0	0	0	0
1877-78	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN	0	1	3	36	136	336	336	262	276	203	103	23	171

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.



STATION NO OR SUMMARY: 93114		STATION NAME Santa Ana, California		LATITUDE 33°42'N		LONGITUDE 117°50'W		STATION ELEV. (FT.) 54		CALL SIGN KNTK		WMO NUMBER	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARO LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office	MCAF	1951	1965	33°42'N	117°49'W	61	Mercurial	Var				
2.	West wall, weather service office	"	1965		"	117°50'W	61	"	"				
1a.	GMQ, 14B console	"	1966		"	"	63	Aneroid	"				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed 1952	Atop hangar	*Selsyn		200'	1. Barograph (ML-3-A) 2. Hygrothermograph 3. Ceiling light (ML-121) 4. Cloud height set (GMQ-13) 5. Theodolite (R-18-T 581) 6. Transmissometer (GMQ-10) 7. Semi-auto met sta (GMQ-14B)
1a.	1960	150' west of runway 24	**DMQ-5	RD-108B	10'	
		* Date disassembled unknown. ** Date first installed unknown.				

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Weather Service Environmental Detachment Souda Bay is located on the Royal Hellenic Air Force Base on the Akrotiri peninsula of Crete. The Akrotiri peninsula is on the north side of Crete about 35 miles from the western end of the island. A low range of mountains is located north of the base about 1 mile. The highest peak is 1732 feet.

The island of Crete is 160 miles long and from 7 to 35 miles wide. It has rugged terrain with a mountainous backbone extending the length of the island. There are a few north/south oriented valleys cleaving passages through the backbone. The highest mountain peaks are slightly above 8,000 feet.

The climate of Souda Bay is typical of the Mediterranean. This climate is characterized by hot, dry summers from May to October with a mild/cool rainy winter. Temperatures rarely drop below freezing along the coasts, but snow is seen frequently in the mountains during the winter months. Snow lingers until late spring on the higher peaks.

The prevailing synoptic pressure patterns over the eastern Mediterranean coupled with the topography of Crete produce a prevailing surface wind at Souda Bay from the northwest quadrant.

SOUDA BAY, CRETE







# MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1975	78.0	70.0	68.0	65.0	62.0	59.0	56.0	53.0	50.0	47.0	44.0	41.0	58.0
1976	78.0	70.0	68.0	65.0	62.0	59.0	56.0	53.0	50.0	47.0	44.0	41.0	58.0
1977	78.0	70.0	68.0	65.0	62.0	59.0	56.0	53.0	50.0	47.0	44.0	41.0	58.0

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1975	1.74	1.11	0.81	1.17	0.89	0.00	0.10	0.14	0.00	0.00	0.00	0.00	6.75
1976	1.74	1.11	0.81	1.17	0.89	0.00	0.10	0.14	0.00	0.00	0.00	0.00	6.75
1977	1.74	1.11	0.81	1.17	0.89	0.00	0.10	0.14	0.00	0.00	0.00	0.00	6.75

# HEATING DEGREE DAYS

Station	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
75-76	0	0	21	109	175	203	269	319	425	482	539	596	3444
76-77	0	0	21	109	175	203	269	319	425	482	539	596	3444
77-78	0	0	21	109	175	203	269	319	425	482	539	596	3444

# COOLING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
1975	0	0	11	20	158	337	313	312	232	101	0	0	1114
1976	0	0	11	20	158	337	313	312	232	101	0	0	1114
1977	0	0	11	20	158	337	313	312	232	101	0	0	1114

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.  
 "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.  
 Partial monthly values were not included in means.

SOUDA BAY, CRETE



STATION NO. ON SUMMARY		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
33209		Souda Bay, Crete		35°32'N		24°09'E		480		KQNC		16746	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Primary weather van	Navy	1978		35°32'N	24°09'E	468	Aneroid	17				
SURFACE WIND EQUIPMENT INFORMATION										REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE			
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	MT ABOVE GROUND								
1.	2/78	1000 ft South of van	UMQ-5A	RD-108B	20'								

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Naval Air Station South Weymouth, Massachusetts, is in the zone of prevailing westerlies. This results in a variety and sometimes rapid change of weather elements. The Appalachian-Adirondack mountain chain acts as an effective barrier to many large systems and results in a general decrease in the water content of those systems which overcome this barrier.

Winter months are characterized by alternate periods of relatively warm, tropical air and cold outbreaks of continental polar or occasionally continental arctic air from the interior. The polar outbreaks bring high winds and heavy precipitation. During the summer season, the Bermuda high becomes the predominate feature of the western Atlantic weather pattern. Warm, moist, maritime tropical air flowing around the western periphery of the Bermuda high is marked by large areas of coastal fog which persists for long periods up to 50 to 100 miles off the coast.

Precipitation is fairly well distributed throughout the year. The annual snowfall accounts for 10.5% of the annual precipitation. Coastal storms, "northeasters", contribute significantly to precipitation amounts during the months of December to April. Summer precipitation amounts are primarily due to frontal rain showers and air mass type thunderstorms. There is no significant dry season for the area.

The prevailing wind is south-southwest and the average velocity is slightly greater than 7 knots. A significant deviation from

the average occurs during the winter months when the prevailing direction becomes west.

Advection/sea fogs are most frequent locally during the early summer. The existence of the cold Labrador Current in the immediate off-shore area to the east of the station is the prime factor causing the fog. Sea fog may be advected in over land by onshore sea breeze winds. Radiation fog becomes most frequent and intense in the autumn. The early autumn season, locally, is typified by partly cloudy days and mostly clear nights which are conducive to the formation of radiation fogs. Maximum fog conditions are usually experienced during the first two hours of daylight. This radiation fog usually dissipates rapidly after 3-4 hours of daylight.

Flying conditions are fairly consistent throughout the year with Visual Flight Rules (VFR) averaging 80-83% of the time. Marginal flying conditions average 14-18% and below field minimums exist 2-4% of the time. During the spring and summer months, clear skies prevail 15-20% of the time increasing to 25-30% during the fall and winter months. Frequently during the summer months haze reduces visibility at the surface and aloft. The haze layer occasionally extends to a height of 10,000 feet.

The hurricane season for the region normally extends from June through November. Most storms that affect this area occur in the months of August and September.

**SOUTH WEYMOUTH, MASSACHUSETTS**







## TOTAL PRECIPITATION INCHES

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1934	N	N	N	23	35	52	70	85	92	95	92	88	84
1935	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1936	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1937	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1938	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1939	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1940	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1941	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1942	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1943	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1944	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1945	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1946	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1947	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1948	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1949	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1950	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1951	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1952	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1953	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1954	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1955	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1956	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1957	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1958	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1959	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1960	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1961	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1962	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1963	25.1	31.1	36.3	42.2	48.2	52.2	56.2	60.2	64.2	68.2	72.2	76.2	79.2
1964	25.1	31.1	36.3	42.2	48.2	52.							

## TOTAL PRECIPITATION INCHES

[illegible]

## HEATING DEGREE DAYS

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
33-34	88	93	101	105	104	59	550
34-35	10	10	10	10	10	10	60
35-36	10	10	10	10	10	10	60
36-37	10	10	10	10	10	10	60
37-38	10	10	10	10	10	10	60
38-39	10	10	10	10	10	10	60
39-40	10	10	10	10	10	10	60
40-41	10	10	10	10	10	10	60
41-42	10	10	10	10	10	10	60
42-43	10	10	10	10	10	10	60
43-44	10	10	10	10	10	10	60
44-45	10	10	10	10	10	10	60
45-46	10	10	10	10	10	10	60
46-47	10	10	10	10	10	10	60
47-48	10	10	10	10	10	10	60
48-49	10	10	10	10	10	10	60
49-50	10	10	10	10	10	10	60
50-51	10	10	10	10	10	10	60
51-52	10	10	10	10	10	10	60
52-53	10	10	10	10	10	10	60
53-54	10	10	10	10	10	10	60
54-55	10	10	10	10	10	10	60
55-56	10	10	10	10	10	10	60
56-57	10	10	10	10	10	10	60
57-58	10	10	10	10	10	10	60
58-59	10	10	10	10	10	10	60
59-60	10	10	10	10	10	10	60
60-61	10	10	10	10	10	10	60
61-62	10	10	10	10	10	10	60
62-63	10	10	10	10	10	10	60
63-64	10	10	10	10	10	10	60
64-65	10	10	10	10	10	10	60
65-66	10	10	10	10	10	10	60
66-67	10	10	10	10	10	10	60
67-68	10	10	10	10	10	10	60
68-69	10	10	10	10	10	10	60
69-70	10	10	10	10	10	10	60
70-71	10	10	10	10	10	10	60
71-72	10	10	10	10	10	10	60
72-73	10	10	10	10	10	10	60
73-74	10	10	10	10	10	10	60
74-75	10	10	10	10	10	10	60
75-76	10	10	10	10	10	10	60
76-77	10	10	10	10	10	10	60
77-78	10	10	10	10	10	10	60
78-79	10	10	10	10	10	10	60
79-80	10	10	10	10	10	10	60
80-81	10	10	10	10	10	10	60
81-82	10	10	10	10	10	10	60
82-83	10	10	10	10	10	10	60
83-84	10	10	10	10	10	10	60
84-85	10	10	10	10	10	10	60
85-86	10	10	10	10	10	10	60
86-87	10	10	10	10	10	10	60
87-88	10	10	10	10	10	10	60
88-89	10	10	10	10	10	10	60
89-90	10	10	10	10	10	10	60
90-91	10	10	10	10	10	10	60
91-92	10	10	10	10	10	10	60
92-93	10	10	10	10	10	10	60
93-94	10	10	10	10	10	10	60
94-95	10	10	10	10	10	10	60</

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1885	10	0	0	0	16	29	125	272	21	93	1	0	817
1886	0	0	0	0	14	110	178	176	69	5	2	0	550
1887	0	0	0	0	31	181	232	123	103	0	0	0	576
1888	0	0	0	0	20	220	222	123	103	0	0	0	552
1889	0	0	0	0	66	72	236	232	150	16	0	0	618
1890	0	0	0	0	44	146	190	170	137	0	0	0	597
1891	0	0	0	0	98	98	108	109	8	1	0	0	277
1892	0	0	0	0	0	219	0	12	13	0	0	0	24
1893	0	0	0	0	47	91	8	8	8	0	0	0	186
1894	0	0	0	0	123	123	123	123	123	0	0	0	600
1895	0	0	0	0	188	188	188	188	188	0	0	0	936
1896	0	0	0	0	3	189	279	250	69	12	0	0	750
1897	0	0	0	0	1	91	306	197	67	21	0	0	603
1898	0	0	0	0	3	136	164	267	63	2	0	0	640
1899	0	0	0	0	13	86	261	266	88	1	0	0	761
1900	0	0	0	0	13	132	261	187	107	0	0	0	680
1901	0	0	0	0	10	136	261	186	107	0	0	0	680
1902	0	0	0	0	10	138	267	186	93	1	0	0	713
1903	0	0	0	0	13	66	266	237	69	0	0	0	609
1904	0	0	0	0	40	116	339	297	16	1	0	0	737
1905	0	0	0	0	36	119	280	169	31	7	0	0	661
1906	0	0	0	0	79	111	302	217	67	0	0	0	664
1907	0	0	0	0	22	116	239	216	63	0	1	0	671

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**SOUTH WEYMOUTH, MASSACHUSETTS**



STATION NO. OR SUMMARY:		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WIND NUMBER	
14790		South Weymouth, Massachusetts		42°09'N		70°56'W		161		KNZW			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office, south side of hangar #1	Navy	1954	1958	42°09'N	70°56'W	156	Mercurial	24				
2.	Same as above	"	1958	1961	"	"	161	"	24				
3.	Weather service office, second floor of hangar #1	"	1961	1967	"	"	172	"	24				
4.	Weather service office, south side of hangar #1, first floor	"	1968		"	"	156	"	24				
1a.	Same as above	"	1967		"	"	158	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION			REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	Installed 1954	Atop control tower	AN/UMQ-5	ANX-1-4C	1. Barograph (ML-3) 2. Semi-auto met sta (AN/GMQ-14B) 3. Ceiling light (ML-121) 4. Cloud height set (AN/GMQ-13C) 5. Transmissometer (AN/GMQ-10B)
1a.	"	*Atop control tower	Selsyn	Triple	
2.	1960	839 feet from center line of runway 8-26	AN/UMQ-5	RD/108B	
		*Survey date unknown			

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Whidbey Island, a 30 mile long narrow island with rolling hills, lies in the northern sector of Puget Sound, about 50 miles northwest of Seattle, Washington. No point of land on the island is more than 3 miles from water, with the highest point of land reaching an elevation of 516 feet. The Strait of Juan de Fuca lies to the west. The Olympic Peninsula lies to the southwest, separated from Whidbey Island by the narrow Admiralty Inlet. The Olympic Mountains are located 30-35 miles southwest of the island. The Naval Air Station, Whidbey Island, lies in the "rain shadow" of the Olympic Range. Local area weather is primarily influenced by the Olympic and Cascade Ranges. The Cascade Range is 40 to 45 miles east of the island.

The climate is characterized by equable temperatures, a pronounced, though not sharply defined rainy season, and considerable cloudiness during the winter months. Summertime temperatures are modified by the waters of Puget Sound and the Pacific Ocean. Temperatures at the surface of Puget Sound near the Naval Air Station vary little from 52 degrees F. during the summer. At times during the warm season, a weak elongated area of low pressure develops along the coast and rather dry hot continental air moves toward the low pressure and spreads over Puget Sound. It is under these conditions that Whidbey Island gets its few hot days. A temperature maximum in the low to mid 80's will be experienced under these conditions.

The agreeable temperatures along with the light precipitation are

characteristic of the warm season. The dry season is centered around July and August. July is the driest month of the year and December is the wettest. Precipitation is rather evenly distributed through the winter and early spring months. The occurrence of snow is extremely variable and very often when it falls it melts before accumulating a measurable depth. Although snow has been recorded during the months of October through May, the first snowfall of the year is most apt to occur during the month of December. The mean annual snowfall at NAS Whidbey Island is 7.7 inches.

Winds are relatively light during the summer months. The wind regime of fall and winter months results almost entirely from the moving storms common to the middle latitudes.

The poorest flying weather of the year occurs during the months of September through January, when 16% to 18% of all weather observations show conditions below Visual Flight Rule standards. Fog and low stratus are frequently observed during the autumn at Whidbey Island. The highest incidence of fog is observed during the month of October. In the typical case, fog will prevail from its onset near midnight through late morning of the following day.

WHIDBEY ISLAND, WASHINGTON







## MEAN TEMPERATURE °F

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1963	1.36	1.57	1.58	1.50	1.48	1.47	1.35	1.40	2.10	1.63	1.22	1.28	19.59
1964	1.52	1.62	1.66	1.58	1.56	1.48	1.35	1.44	2.04	1.62	1.22	1.28	19.59
1965	1.67	1.74	1.76	1.68	1.66	1.58	1.45	1.46	2.10	1.63	1.22	1.28	19.59
1966	1.83	1.93	1.94	1.85	1.83	1.74	1.61	1.61	2.10	1.63	1.22	1.28	19.59
1967	1.98	2.08	2.10	2.00	1.98	1.89	1.76	1.76	2.10	1.63	1.22	1.28	19.59
1968	2.13	2.23	2.25	2.15	2.13	2.04	1.91	1.91	2.10	1.63	1.22	1.28	19.59
1969	2.28	2.38	2.40	2.30	2.28	2.19	2.06	2.06	2.10	1.63	1.22	1.28	19.59
1970	2.43	2.53	2.55	2.45	2.43	2.34	2.21	2.21	2.10	1.63	1.22	1.28	19.59
1971	2.58	2.68	2.70	2.60	2.58	2.49	2.36	2.36	2.10	1.63	1.22	1.28	19.59
1972	2.73	2.83	2.85	2.75	2.73	2.64	2.51	2.51	2.10	1.63	1.22	1.28	19.59
1973	2.88	2.98	3.00	2.90	2.88	2.79	2.66	2.66	2.10	1.63	1.22	1.28	19.59
1974	3.03	3.13	3.15	3.05	3.03	2.94	2.81	2.81	2.10	1.63	1.22	1.28	19.59
1975	3.18	3.28	3.30	3.20	3.18	3.09	2.96	2.96	2.10	1.63	1.22	1.28	19.59
1976	3.33	3.43	3.45	3.35	3.33	3.24	3.11	3.11	2.10	1.63	1.22	1.28	19.59
1977	3.48	3.58	3.60	3.50	3.48	3.39	3.26	3.26	2.10	1.63	1.22	1.28	19.59
1978	3.63	3.73	3.75	3.65	3.63	3.54	3.41	3.41	2.10	1.63	1.22	1.28	19.59
1979	3.78	3.88	3.90	3.80	3.78	3.69	3.56	3.56	2.10	1.63	1.22	1.28	19.59
1980	3.93	4.03	4.05	3.95	3.93	3.84	3.71	3.71	2.10	1.63	1.22	1.28	19.59
1981	4.08	4.18	4.20	4.10	4.08	3.99	3.86	3.86	2.10	1.63	1.22	1.28	19.59
1982	4.23	4.33	4.35	4.25	4.23	4.14	4.01	4.01	2.10	1.63	1.22	1.28	19.59
1983	4.38	4.48	4.50	4.40	4.38	4.29	4.16	4.16	2.10	1.63	1.22	1.28	19.59
1984	4.53	4.63	4.65	4.55	4.53	4.44	4.31	4.31	2.10	1.63	1.22	1.28	19.59
1985	4.68	4.78	4.80	4.70	4.68	4.59	4.46	4.46	2.10	1.63	1.22	1.28	19.59
1986	4.83	4.93	4.95	4.85	4.83	4.74	4.61	4.61	2.10	1.63	1.22	1.28	19.59
1987	4.98	5.08	5.10	5.00	4.98	4.89	4.76	4.76	2.10	1.63	1.22	1.28	19.59
1988	5.13	5.23	5.25	5.15	5.13	5.04	4.91	4.91	2.10	1.63	1.22	1.28	19.59
1989	5.28	5.38	5.40	5.30	5.28	5.19	5.06	5.06	2.10	1.63	1.22	1.28	19.59
1990	5.43	5.53	5.55	5.45	5.43	5.34	5.21	5.21	2.10	1.63	1.22	1.28	19.59
1991	5.58	5.68	5.70	5.60	5.58	5.49	5.36	5.36	2.10	1.63	1.22	1.28	19.59
1992	5.73	5.83	5.85	5.75	5.73	5.64	5.51	5.51	2.10	1.63	1.22	1.28	19.59
1993	5.88	5.98											

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1908	N	N	N	17.5	56.09	57.5	51.5	40.9	55.9	55.0	43.7	43.89	N
1909	41.7	42.6	44.2	49.0	50.2	57.7	59.8	59.1	59.1	59.0	45.6	45.39	N
1910	42.6	43.6	44.6	49.0	50.2	57.7	59.8	59.1	59.1	59.0	45.6	45.39	N
1911	43.6	44.6	45.6	50.2	51.4	58.2	60.4	60.4	60.4	60.4	46.8	46.8	N
1912	44.6	45.6	46.6	51.4	52.6	59.8	61.0	61.0	61.0	61.0	48.0	48.0	N
1913	45.6	46.6	47.6	52.6	53.8	61.0	62.2	62.2	62.2	62.2	49.2	49.2	N
1914	46.6	47.6	48.6	53.8	55.0	62.2	63.4	63.4	63.4	63.4	50.4	50.4	N
1915	47.6	48.6	49.6	55.0	56.2	63.4	64.6	64.6	64.6	64.6	51.6	51.6	N
1916	48.6	49.6	50.6	56.2	57.4	64.6	65.8	65.8	65.8	65.8	52.8	52.8	N
1917	49.6	50.6	51.6	57.4	58.6	65.8	67.0	67.0	67.0	67.0	54.0	54.0	N
1918	50.6	51.6	52.6	58.6	59.8	67.0	68.2	68.2	68.2	68.2	55.2	55.2	N
1919	51.6	52.6	53.6	59.8	61.0	68.2	69.4	69.4	69.4	69.4	56.4	56.4	N
1920	52.6	53.6	54.6	61.0	62.2	69.4	70.6	70.6	70.6	70.6	57.6	57.6	N
1921	53.6	54.6	55.6	62.2	63.4	70.6	71.8	71.8	71.8	71.8	58.8	58.8	N
1922	54.6	55.6	56.6	63.4	64.6	71.8	73.0	73.0	73.0	73.0	60.0	60.0	N
1923	55.6	56.6	57.6	64.6	65.8	73.0	74.2	74.2	74.2	74.2	61.2	61.2	N
1924	56.6	57.6	58.6	65.8	67.0	74.2	75.4	75.4	75.4	75.4	62.4	62.4	N
1925	57.6	58.6	59.6	67.0	68.2	75.4	76.6	76.6	76.6	76.6	63.6	63.6	N
1926	58.6	59.6	60.6	68.2	69.4	76.6	77.8	77.8	77.8	77.8	64.8	64.8	N
1927	59.6	60.6	61.6	69.4	70.6	77.8	79.0	79.0	79.0	79.0	66.0	66.0	N
1928	60.6	61.6	62.6	70.6	71.8	79.0	80.2	80.2	80.2	80.2	67.2	67.2	N
1929	61.6	62.6	63.6	71.8	73.0	80.2	81.4	81.4	81.4	81.4	68.4	68.4	N
1930	62.6	63.6	64.6	73.0	74.2	81.4	82.6	82.6	82.6	82.6	69.6	69.6	N
1931	63.6	64.6	65.6	74.2	75.4	82.6	83.8	83.8	83.8	83.8	70.8	70.8	N
1932	64.6	65.6	66.6	75.4	76.6	83.8	85.0	85.0	85.0	85.0	72.0	72.0	N
1933	65.6	66.6	67.6	76.6	77.8	85.0	86.2	86.2	86.2	86.2	73.2	73.2	N
1934	66.6	67.6	68.6	77.8	79.0	86.2	87.4	87.4	87.4	87.4	74.4	74.4	N
1935	67.6	68.6	69.6	79.0	80.2	87.4	88.6	88.6	88.6	88.6	75.6	75.6	N
1936	68.6	69.6	70.6	80.2	81.4	88.6	89.8	89.8	89.8	89.8	76.8	76.8	N
1937	69.6	70.6	71.6	81.4	82.6	89.8	91.0	91.0	91.0	91.0	78.0	78.0	N
1938	70.6	71.6	72.6	82.6	83.8	91.0	92.2	92.2	92.2	92.2	79.2	79.2	N
1939	71.6	72.6											

## HEATING DEGREE DAYS

[illegible]

Season	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	Jun.	Total
44-45	106	123	265	384	632	N	714	625	454	518	353	216	N
45-46	170	267	483	550	717	801	717	625	454	518	353	216	N
46-47	170	267	483	550	717	801	717	625	454	518	353	216	N
47-48	176	311	304	N	625	846	N	714	625	454	518	353	N
48-49	176	311	304	N	625	846	N	714	625	454	518	353	N
49-50	254	248	246	274	624	584	1345	677	714	625	454	518	6495
50-51	254	248	246	274	624	584	1345	677	714	625	454	518	6495
51-52	190	149	161	654	599	847	824	676	665	850	N	286	5
52-53	221	141	234	421	659	630	549	590	600	472	352	310	3248
53-54	186	131	234	374	662	649	605	714	625	454	518	353	216
54-55	252	226	235	440	735	665	738	693	763	351	449	337	2845
55-56	252	226	235	440	735	665	738	693	763	351	449	337	2845
56-57	192	205	305	475	657	713	662	716	665	449	324	244	2538
57-58	219	191	199	468	616	631	617	676	625	444	283	146	6961
58-59	219	191	199	468	616	631	617	676	625	444	283	146	6961
59-60	115	139	240	407	633	613	613	676	625	444	283	146	2277
60-61	130	270	264	400	647	743	780	676	664	497	373	274	2663
61-62	149	171	267	413	621	702	818	797	628	352	288	255	2805
62-63	149	171	267	413	621	702	818	797	628	352	288	255	2805
63-64	216	159	180	384	517	670	912	534	624	486	344	269	3330
64-65	213	159	180	384	517	670	912	534	624	486	344	269	3330
65-66	203	140	321	440	675	674	722	602	678	490	448	244	2890
66-67	176	146	315	375	696	774	700	610	633	477	415	244	2332
67-68	233	154	204	442	550	600	651	394	444	351	263	178	2213
68-69	233	154	204	442	550	600	651	394	444	351	263	178	2213
69-70	119	142	292	440	623	683	1019	674	625	478	283	192	2637
70-71	123	217	271	437	606	683	764	379	426	340	406	228	2444
71-72	136	196	311	513	683	703	700	711	611	340	283	244	2444
72-73	162	171	533	844	604	856	782	640	611	512	378	292	3878
73-74	195	249	205	444	643	643	637	638	631	471	446	402	2713
74-75	174	240	446	549	621	719	704	468	580	442	303	240	2840
75-76	166	159	237	446	647	647	647	647	647	647	647	647	2771
76-77	249	174	274	351	682	743	609	584	590	350	418	246	2771
77-78	249	174	274	351	682	743	609						
MEAN	191	183	263	446	606	726	768	642	633	514	333	236	2639

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

record; "p" denotes partial record, i.e. less than 10 days record missing. Partial monthly values were not included in means.



STATION NO ON SUMMARY 24255		STATION NAME Whidbey Island, Washington		LATITUDE 48°21'N		LONGITUDE 122°40'W		STATION ELEV (FT) 47		CALL SIGN KNUW		WMO NUMBER	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Weather service office in ops bldg	Navy	*1949	1955	48°21'N	122°40'W	25	Tunnelot	24				
2.	In penthouse above main portion of the roof of new ops bldg	"	1955	1965	"	"	54	"	24				
3.	Weather service office, bldg #385	"	1965	1973	"	"	32	Fortin	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	Installed	Atop operations building	3-cup Selsyn	Double register	-	* Earlier documentation not available.
2.	1955	Atop "Penthouse" located atop of the main portion of new ops bldg	"	"	58'	1. Barometer, aneroid (ML-448/UM)
3.	1959	Both selsyn and double register anemometers removed and replaced with AN/UMQ-5 which is located 2800' from the ops bldg on a bearing of 059°	AN/UMQ-5	RD-108B	13'	2. Barograph (AERO-1932) 3. Semi-auto met sta (AN/GMQ-14A) 4. Ceiling light 5. Cloud height set (AN/GMQ-13B) 6. Transmissometer (AN/GMQ-10)
4.	1963	Runway intersection	AN/UMQ-5C	RD-108	13'	

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Whiting Field, Milton Florida consists of two airports, North Whiting Field and South Whiting Field which are approximately 2 miles apart. NAS Whiting Field is located 22 miles northeast of the city of Pensacola and 7 miles north of the city of Milton, Florida. The average runway height is 180 feet above mean sea level with gently rolling wooded terrain in all quadrants. There are no large bodies of water in the immediate vicinity. Pensacola Bay lies 15 miles south of Whiting and the Gulf of Mexico 5 miles farther south.

Rainfall is usually well distributed through the year, on the average, measurable amounts occur on 119 days. On the average, there are 70 days per year with thunderstorms. A considerable percentage of rainfall occurs during daylight hours from thunder showers. The greatest amount of snow recorded in a month was 3.5 inches in January 1977. Snow is a rarity and only traces have been recorded in 12 other years. The highest monthly amount of rainfall was 23.89 inches in March 1970 with a 24-hour maximum of 10.75 inches.

Destructive storms in the Whiting Field area are of two types, tornadoes and hurricanes. Tornadoes are by far the more dangerous threat. Tornadoes are a potential threat throughout the year; however, May through August is the "tornado season".

During the 13-year period prior to 1970 there have been 11 confirmed tornadoes reported in the immediate county. In addition to this confirmed count, many unconfirmed funnel clouds and tornadoes have been reported. Hurricanes are much less numerous. Destructive hurricanes have been experienced 9 times since 1879. In only 1 of these storms was there loss of life or major destruction.

The annual mean daily temperature is a comfortable 67.8 degrees F. Only an average of 19 days a year does the temperature dip to 32 degrees F. or below. The mean daily relative humidity is nearly constant year round in the low 70's.

Flying weather is above Visual Flight Rules (VFR) minimums 86% of the time. Marginal flying weather exists about 10% of the time. A major threat to flying safety during the summer months is air mass thunderstorm activity. During June, July, and August an average of 39 thunderstorms will occur, mainly during the late afternoon hours. Other flying safety weather problems are fog and low stratus. Fog is observed on the average of 200 days a year. January and March are the most foggy months with 17 to 18 days with fog observed. With the field surrounded by trees, fog has a tendency to hold in the area longer than other airports in the complex.

WHITING FIELD, FLORIDA







# MEAN TEMPERATURE OF

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	57.2	61.2	67.2	72.2	75.2	78.2	80.2	81.2	79.2	75.2	70.2	64.2	72.8
1946	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1947	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1948	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1949	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1950	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1951	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1952	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1953	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1954	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1955	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1956	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1957	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1958	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1959	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1960	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1961	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1962	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1963	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1964	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1965	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1966	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1967	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1968	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1969	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1970	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1971	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1972	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1973	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1974	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1975	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1976	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1977	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1978	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
1979	56.2	60.2	66.2	71.2	74.2	77.2	79.2	80.2	78.2	74.2	69.2	63.2	72.3
1980	56.7	60.7	66.7	71.7	74.7	77.7	79.7	80.7	78.7	74.7	69.7	63.7	72.3
MEAN	56.9	60.4	66.4	71.4	74.4	77.4	79.4	80.4	78.4	74.4	69.4	63.4	72.4

# HEATING DEGREE DAYS

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	170	140	100	60	20	0	0	0	0	0	0	0	470
1946	170	140	100	60	20	0	0	0	0	0	0	0	470
1947	170	140	100	60	20	0	0	0	0	0	0	0	470
1948	170	140	100	60	20	0	0	0	0	0	0	0	470
1949	170	140	100	60	20	0	0	0	0	0	0	0	470
1950	170	140	100	60	20	0	0	0	0	0	0	0	470
1951	170	140	100	60	20	0	0	0	0	0	0	0	470
1952	170	140	100	60	20	0	0	0	0	0	0	0	470
1953	170	140	100	60	20	0	0	0	0	0	0	0	470
1954	170	140	100	60	20	0	0	0	0	0	0	0	470
1955	170	140	100	60	20	0	0	0	0	0	0	0	470
1956	170	140	100	60	20	0	0	0	0	0	0	0	470
1957	170	140	100	60	20	0	0	0	0	0	0	0	470
1958	170	140	100	60	20	0	0	0	0	0	0	0	470
1959	170	140	100	60	20	0	0	0	0	0	0	0	470
1960	170	140	100	60	20	0	0	0	0	0	0	0	470
1961	170	140	100	60	20	0	0	0	0	0	0	0	470
1962	170	140	100	60	20	0	0	0	0	0	0	0	470
1963	170	140	100	60	20	0	0	0	0	0	0	0	470
1964	170	140	100	60	20	0	0	0	0	0	0	0	470
1965	170	140	100	60	20	0	0	0	0	0	0	0	470
1966	170	140	100	60	20	0	0	0	0	0	0	0	470
1967	170	140	100	60	20	0	0	0	0	0	0	0	470
1968	170	140	100	60	20	0	0	0	0	0	0	0	470
1969	170	140	100	60	20	0	0	0	0	0	0	0	470
1970	170	140	100	60	20	0	0	0	0	0	0	0	470
1971	170	140	100	60	20	0	0	0	0	0	0	0	470
1972	170	140	100	60	20	0	0	0	0	0	0	0	470
1973	170	140	100	60	20	0	0	0	0	0	0	0	470
1974	170	140	100	60	20	0	0	0	0	0	0	0	470
1975	170	140	100	60	20	0	0	0	0	0	0	0	470
1976	170	140	100	60	20	0	0	0	0	0	0	0	470
1977	170	140	100	60	20	0	0	0	0	0	0	0	470
1978	170	140	100	60	20	0	0	0	0	0	0	0	470
1979	170	140	100	60	20	0	0	0	0	0	0	0	470
1980	170	140	100	60	20	0	0	0	0	0	0	0	470
MEAN	170	140	100	60	20	0	0	0	0	0	0	0	470

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

"M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

# TOTAL PRECIPITATION INCHES

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Annual
1945	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1946	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1947	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1948	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1949	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1950	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1951	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1952	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1953	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1954	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1955	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1956	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1957	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1958	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1959	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1960	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1961	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1962	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1963	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1964	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1965	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1966	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1967	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1968	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1969	1.2	1.0	1.5	2.0	2.5	3.0	3.5	3.0	2.5	2.0	1.5	1.0	24.0
1													



STATION NO ON SUMMARY:		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV. (FT.)		CALL SIGN		WMO NUMBER	
93841		Whiting Field (Milton), Florida		30°43'N		87°01'W		200		KNSE			
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARQ. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	North west corner hangar 1424	Navy		1950	30°46'N	87°01'W	208	Mercurial	Var				
2.	Room 34, building 1424	"	1950	1953	30°43'N	"	196	"	"				
3.	First deck hangar 1424	"	1953		"	"	175	"	"				
4.	First deck hangar 1424	"	1960		"	"	177	"	"				
1a.	Weather service office	"	1959	1975	"	"	179	Aneroid	"				
2a.	Second deck of hangar 1424	"	1975		"	"	222	"	24				

SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE	
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND
1.	Installed 1950	North field hangar roof	Selsyn	Triple	277 MSL
2.	1957	South field hangar roof	UMQ-5	RD-108	"
3.	1958	Selsyn replaced with aerovane	"	"	"
4.	1959	North of weather office	UMQ-5D	"	13'

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Naval Air Station Willow Grove, Pennsylvania is located 20 miles north-northeast of the city of Philadelphia. The immediate terrain is rolling hills and to the northwest the hills increase in height. The terrain rises about 200 to 300 feet between valleys and ridges to the north of the station, continuing to the north and northwest.

Willow Grove is in the temperate latitudes, with a prevailing west to east flow of atmospheric systems. This produces a variety and at times, rapidly changing array of weather elements.

The location and orientation of the mountain chain to the west and north has significant effects on eastward moving frontal systems. The nearest coastal section of the Atlantic Ocean is about 70 miles east of the station. The industrial area of Philadelphia produces haze and smoke conditions that persist when southwest to southeast winds prevail.

Four distinct seasons prevail at Willow Grove. Continental air masses predominate during the winter months but on many occasions considerable modifications occur. During the summer season, the Bermuda high dominates the weather pattern of the area.

The station has a moderate climate. Periods of very high or low temperatures seldom last more than several days as conditions change fairly rapidly. The annual mean temperature is 53 degrees F. Due to the prevalence of maritime air during the summer months, the humidity adds to the discomfort of higher temperatures.

Flying conditions are excellent. The field is above Visual Flight Rules (VFR) minimums 90% of the time. Heavy fog, causing marginal flying conditions, is most prevalent during the autumn and winter months.

Precipitation is fairly evenly distributed throughout the year with maximum amounts during the late summer months. The average annual rainfall is 45 inches. Much of the summer rainfall is in connection with local thunderstorms. The average annual snowfall is 19.8 inches. Single storms of 10 inches or more occur about every 5 years.

The prevailing wind direction for the summer months is from the west, while northwesterly winds prevail during the winter. Destructive winds are comparatively rare and occur mostly in gustiness during summer thunderstorms.

WILLOW GROVE, PENNSYLVANIA



PREPARED BY: NWS ASHEVILLE  
JUNE 1978

STATION NAME: WILLOW GROVE, PENNSYLVANIA  
LOCATION: 1 N40 11 W75 08

PERIOD: FEB 48-DEC 77  
ELEV: 1369

STN LTR: KHX  
MOAN: 1 10793  
WHO: 1

TEMPERATURE										PRECIPITATION										SNOWFALL										MEAN 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MEAN	30.0	32.4	40.0	51.1	60.5	70.1	74.8	77.0	86.1	88.3	44.5	34.2	32.7
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Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904	N	1,380	2,120	3,12	4,100	5,15	13,04	3,20	0,25	1,370	3,82	N	
1905	2,100	1,41	N	N	4,100	5,07	8,830	N	1,740	N	2,580	N	
1906	N	N	N	3,20	N	N	N	N	N	2,520	6,140	N	
1907	N	N	N	N	N	N	N	N	N	N	N	N	
1908	N	N	2,240	2,28	2,600	4,000	5,100	2,51	3,76	2,20	7,1	5,600	
1909	2,00	3,00	3,05	2,05	4,05	1,01	4,01	0,25	3,41	2,02	1,200	3,44	
1910	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	2,00	
1911	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1912	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1913	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1914	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1915	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1916	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1917	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1918	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1919	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1920	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1921	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1922	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1923	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1924	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1925	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1926	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1927	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1928	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1929	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1930	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1931	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1932	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1933	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1934	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1935	2,02	1,09	2,18	2,22	2,49	2,44	3,12	2,17	2,12	2,12	2,12	2,12	
1936	2,02	1,09											

	MEAN	2.90	2.67	6.41	3.68	6.19	3.91	6.11	4.86	3.78	3.24	3.66	3.80	66.98
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[illegible]

MEAN	1	6	76	307	611	949	1076	914	767	618	176	29	9320
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Year	Jan	Feb	Mar	Apr	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1844					28	170	847	216	140		0		
1845	H	H	I	0	11	139	H	184		32			
1846	H	H	G	0	39	250	H	284	182		H		
1847	H	G	G	0	59	258	H	258	158		G		
1848					39	258	H	258	158	50			
1849													
1850	H			0	3	139	398	209	39		12		
1851				0	3	15	227	408	249	17			
1852				0	0	48	227	408	249	102			
1853				0	0	3	42	219	328	139	4		
1854				0	0	0	0	0	0	0	0		
1855				0	0	16	20	183	307	196	99		
1856				0	0								
1857				0	0	47	138	438	H	92			
1858				0	0	39	208	543	269	108	0		
1859				0	0	39	208	543	269	108	2		
1860				0	0	39	208	543	269	108	2		
1861				0	0	39	208	543	269	108	2		
1862				0	0	39	208	543	269	108	2		
1863				0	0	39	208	543	269	108	2		
1864				0	0	39	208	543	269	108	2		
1865				0	0	39	208	543	269	108	2		
1866				0	0	39	208	543	269	108	2		
1867				0	0	39	208	543	269	108	2		
1868				0	0	39	208	543	269	108	2		
1869				0	0	39	208	543	269	108	2		
1870				0	0	39	208	543	269	108	2		
1871				0	0	39	208	543	269	108	2		
1872				0	0	39	208	543	269	108	2		
1873				0	0	39	208	543	269	108	2		
1874				0	0	39	208	543	269	108	2		
1875				0	0	39	208	543	269	108	2		
1876				0	0	39	208	543	269	108	2		
1877				0	0	39	208	543	269	108	2		
1878				0	0	39	208	543	269	108	2		
1879				0	0	39	208	543	269	108	2		
1880				0	0	39	208	543	269	108	2		
1881				0	0	39	208	543	269	108	2		
1882				0	0	39	208	543	269	108	2		
1883				0	0	39	208	543	269	108	2		
1884				0	0	39	208	543	269	108	2		
1885				0	0	39	208	543	269	108	2		
1886				0	0	39	208	543	269	108	2		
1887				0	0	39	208	543	269	108	2		
1888				0	0	39	208	543	269	108	2</		

NAME	0	0	0	0	42	109	911	200	110	14	2	0	920
NAME	0	0	0	0	42	109	911	200	110	14	2	0	920

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

cord; "P" denotes partial record, i.e. less than 10 days record missing.

Partial monthly values were not included in means.

**WILLOW GROVE, PENNSYLVANIA**



STATION NO. ON SUMMARY:		STATION NAME:		LONGITUDE:		STATION ELEV. (FT.)		CALL SIGN:		WHO NUMBER:	
14793		Willow Grove, Pennsylvania		40°11'N		75°08'W		369		KNXX	
STATION LOCATION AND INSTRUMENTATION HISTORY											
NUMBER OF BARO. LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY		
			FROM	TO			FEET	TYPE BAROMETER			
1.	Weather service office, second deck of ops bldg	USN	1949	1956	40°11'N	75°08'W	380	Tonnelot	Var		
2.	Weather service office, ground floor of hangar/ops bldg	"	1956		"	"	346	"	"		
1a.	Weather office in GMQ-14 cabinet	"	1967		"	"	348	Aneroid	"		

SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	MT ABOVE GROUND	
1.				
1a.	Installed 1958	Above control tower roof 1800' west southwest from hangar/operations building	*Selsyn UMQ-5C	1. Barograph (ML-3) 2. Semi-auto met sta (AN/GMQ-14) 3. Ceiling light (ML-121)
2a.	1965	4600' southeast of hangar 80.	"	4. Cloud height set (AN/GMQ-13) 5. Transmissometer (AN/GMQ-10)
3.	1977	500' southwest of centerline 15-33 Top of control tower, SW corner of hangar 80	"	6. Radar (RO15/GMH-6) 7. GOES (RO 379/GMH)
		*Decommissioned 1958.		8. Pilot to forecaster radio (RHMS 9)

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

The Yokosuka Naval Base is located on the Miura Peninsula which forms the western shore of Uraga Channel, the entrance to Tokyo Bay. The peninsula is rugged and hilly with peaks on its western side rising above 600 feet. The eastern shore of Uraga Channel is formed by the Chiba Peninsula, also rugged with many peaks over 500 feet and several over 1,000 feet. The Chiba Peninsula effectively blocks strong winds from the east and southeast.

The Naval Base is bounded by Tokyo Bay on the north, east, and southeast. To the south, and extending through west to northwest, is a range of low hills which forms the central spine of the Miura Peninsula.

Because of these geographical features, Yokosuka Naval Base is exposed to strong winds from the north northwest through northeast quadrant. Small craft warnings are issued for winds of 18 knots or greater from this quadrant. Waves generated by winds from a northerly direction have a 30-mile fetch across Tokyo Bay. Exposure to winds from the southwest is less critical since the pier facilities and anchorage areas are well protected. The value of Yokosuka as a safe refuge for ships during severe storms is well documented.

The climate of Yokosuka is essentially one of monsoonal circulation and maritime influences leading to warm, humid summers and mild winters separated by two pronounced rainy

seasons. The two pronounced wet seasons are during May through June and August - September. Annual precipitation amounts average 64 inches.

In summer, the polar front lies well to the north and Yokosuka comes under the influence of the western extension of the Pacific high. In winter, with the polar front to the south of the Bonin Islands, the circulation is of the winter monsoon type moderated by the Sea of Japan. Winters are relatively mild and dry with occasional snowfall.

Frequent daily helicopter operations are the only flight activities conducted at Yokosuka and visibility conditions are seldom critical for these. Fog occurs on more than half the days of April through October.

Strong winds are a primary factor in Yokosuka's weather. These may be associated with storms or gradient. Winds well in excess of 50 knots have been recorded in every month of the year.

Local phenomena include a year-round land/sea breeze effect. In winter, the land breeze tends to reinforce northerly winds associated with polar outbreaks resulting in 3 or 4 hours of strong gusty winds during the early forenoon.

Typhoons are the most hazardous weather experienced at Yokosuka. An average of 3 per year affect the area.

**YOKOSUKA, JAPAN**



SYN LTR: RJTX  
WDAN @ 43323  
WMO @ 47696

FLYING NEA & MRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVA
CEILING	00	24	28	37	39	34	46	41	31	43	39	29	21	34	23
LESS 5000	03	24	31	40	36	30	10	9	5	46	40	27	20	36	23
PT AND/OR	06	23	34	42	41	53	12	17	36	51	43	30	22	37	23
VISIBILITY	09	24	31	36	37	49	8	6	40	47	39	28	22	37	23
LESS 5 MI	12	19	26	31	31	40	37	35	29	36	33	27	20	30	23
	15	20	26	32	32	37	37	29	23	33	32	24	20	28	23
	18	22	28	32	28	31	36	31	23	34	32	29	22	30	23
	21	22	30	36	32	34	42	34	28	42	37	29	21	33	23
ALL MRS	22	22	30	36	36	33	44	39	32	42	37	28	21	33	23
CEILING	00	2	3	4	6	6	10	9	4	5	5	2	1	5	23
LESS 1000	03	1	3	7	9	6	10	9	5	5	5	2	1	5	23
PT AND/OR	06	2	3	7	9	12	14	17	5	9	9	2	1	8	23
VISIBILITY	09	2	3	8	6	10	12	10	6	6	10	4	2	7	23
LESS 5 MI	12	2	4	5	7	7	8	6	4	6	7	4	2	5	23
	15	2	5	5	7	7	8	5	3	5	7	4	2	5	23
	18	2	5	6	7	9	9	5	3	6	7	4	2	5	23
	21	2	4	4	5	7	9	6	3	5	7	3	1	5	23
ALL MRS	22	2	4	5	7	8	10	8	5	6	7	3	1	6	23
CEILING	00	0	0	0	1	0	0	0	0	0	0	0	0	0	23
LESS 500	03	0	0	1	1	1	1	1	0	0	1	0	0	1	23
PT AND/OR	06	0	0	1	0	1	1	2	1	1	0	1	0	1	23
VISIBILITY	09	0	0	0	0	1	0	0	0	0	0	0	0	0	23
LESS 1/2 MI	12	0	1	0	0	1	0	0	0	0	0	0	0	0	23
	15	0	0	0	1	1	0	0	0	0	0	0	0	0	23
	18	0	0	0	1	1	0	0	0	0	0	0	0	0	23
	21	0	0	0	1	1	0	0	0	0	0	0	0	0	23
ALL MRS	21	0	0	0	1	1	0	0	0	0	0	0	0	0	23
CEILING	00	0	0	0	0	0	0	0	0	0	0	0	0	0	23
LESS 100	03	0	0	0	0	0	0	0	0	0	0	0	0	0	23
PT AND/OR	06	0	0	0	0	0	0	0	0	0	0	0	0	0	23
VISIBILITY	09	0	0	0	0	0	0	0	0	0	0	0	0	0	23
LESS 1/4 MI	12	0	0	0											



## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

[illegible]

## MEAN TEMPERATURE OF

[illegible]

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F. "M" indicates missing record; "P" denotes partial record, i.e. less than 10 days record missing.



STATION NO OR SUMMARY:		STATION NAME		LATITUDE		LONGITUDE		STATION ELEV (FT)		CALL SIGN		WMO NUMBER	
43323		Yokosuka, Japan		35°17'N		139°40'E		174		RJTX		47696	
<b>STATION LOCATION AND INSTRUMENTATION HISTORY</b>													
NUMBER OF BARQ LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MSL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	Fleet Weather Central, third deck	NS	Prior to 1953	1953	35°17'N	139°40'E	198	Mercurial	24				
2.	" " " first deck	"	1953	1953	"	"	174	"	24				
3.	" " " third deck	"	1953	1955	"	"	198	"	24				
4.	" " " first deck	"	1955	1962	"	"	174	"	24				
5.	Instrument error redetermined 8/62	"	1962	1963	"	"	"	"	24				
6.	New barometer installed	"	1963	1974	"	"	"	"	24				
1a.	Bulkhead, 1st deck	"	1972		"	"	176	Aneroid	24				

SURFACE WIND EQUIPMENT INFORMATION					REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
NUMBER OF LOCATION	DATE OF CHANGE	LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	
1.	Prior to 1953	Transmitter on roof of ops bldg	AN/UMQ-5	RD-108	1. Microbarograph 2. AN/GKR-4
2.	1955	Transmitter relocated on 18' mast near east corner of ops bldg, also one on west corner at same altitude Recorder inoperative Aug 57 thru June 58	"	"	
2a.		Installation of new recorder	"	RD-108B	
2b.	1958	Transmitter mounted on 15' mast	"	"	
3.	1960	Transmitter relocated on roof of ops bldg	AN/UMQ-5C	"	220'
4.	1969	Mounted on 25' mast on roof of bldg			230'

NWSD, Federal Building  
Asheville, N. C.



# STATION CLIMATIC SUMMARY

PREPARED BY THE NAVAL WEATHER SERVICE DETACHMENT, ASHEVILLE, N.C.  
FOR THE DIRECTOR, NAVAL OCEANOGRAPHY AND METEOROLOGY



## NARRATIVE SUMMARY

Marine Corps Air Station, Yuma, Arizona is located in the extreme southwestern corner of Arizona in the Yuma Valley. The climate is characterized as desert with mild winters and hot summers. Except to the south where the Yuma Valley reaches the Gulf of California, it is almost completely boxed in by mountains. The Gila Mountains 20 miles east are the nearest.

The California coastal range blocks the Yuma area from almost all of the precipitation and cloudiness that is common along the Pacific Coast. During the winter months a strong southwest to westerly flow aloft can transport moisture across the coastal range in sufficient quantities to produce heavy cloudiness and light to moderate rain in the Yuma area. When there is a southerly low level flow of moisture laden air from the Gulf of California the humidity increase is noticed. A persistent easterly flow aloft can bring in moisture from as far as the Gulf of Mexico during the summer.

Spring and fall are normally of short duration at Yuma and serve only as a period of change between the two main seasons of winter and summer. The winter season, October through March,

is the period with the most rainfall, an average of 1.59 inches for the season. During the winter months Yuma's prevailing winds are north through west-northwest predominately north.

During the Yuma summer season, April through September, the climate is characterized by high temperatures and low rainfall - a seasonal average of less than 1 inch. The prevailing winds during the summer season at Yuma are southeast through west with a speed of less than 12 knots.

On occasion, a tropical storm will form in the southern Gulf of California. While most storms will move westward into the Pacific Ocean, occasionally one will move northward up the Gulf of California and bring extensive low clouds and rain to the Yuma area. While Yuma experiences excellent flying conditions more than 98% of the time, two related weather phenomena that create almost all of the aviation weather hazards at MCAS Yuma should be noted - high winds and blowing sand. High winds of more than 17 knots occur 3% of the time while winds of more than 28 knots occur less than .1% of the time. A wind speed of 28 knots is the threshold value used for blowing sand.

YUMA, ARIZONA



STN LTRS: KNYL  
WBAN # : 28195  
WMO # : 1

FLYING MEA * HRS	LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	EVR
CEILING	02	2	1	1	1	0	0	0	0	1	1	1	3	1	29
LESS 5000	05	3	1	1	1	0	0	1	0	1	1	1	4	1	29
PT AND/OR	08	4	1	2	1	0	1	1	0	1	2	2	3	2	29
VISIBILITY	11	4	3	3	2	1	0	1	2	2	2	4	4	2	29
LESS 5 MI	14	4	4	3	2	1	0	0	2	1	1	2	4	2	29
	17	3	2	3	2	1	1	1	1	1	1	2	3	2	29
	20	3	1	1	1	1	1	1	0	1	0	0	1	1	29
	23	2	1	1	1	0	1	0	0	0	0	0	1	1	29
ALL HRS		3	2	2	1	1	0	1	1	1	1	1	3	1	29
CEILING	02	0	0	0	0	0	0	0	0	0	0	0	1	0	29
LESS 1500	05	1	0	0	0	0	0	0	0	0	0	0	2	0	29
PT AND/OR	08	2	0	0	0	0	0	0	0	0	0	0	1	1	29
VISIBILITY	11	1	1	1	1	0	0	0	0	0	0	1	1	1	29
LESS 3 MI	14	1	1	1	2	0	0	0	0	0	1	1	1	1	29
	17	1	1	0	1	1	0	0	0	0	1	0	0	0	29
	20	1	0	0	0	0	1	0	0	0	0	0	1	0	29
	23	0	0	0	0	0	0	0	0	0	0	0	0	0	29
ALL HRS		1	1	1	1	0	0	0	0	0	0	1	1	0	29
CEILING	02	0	0	0	0	0	0	0	0	0	0	0	1	0	29
LESS 1000	05	1	0	0	0	0	0	0	0	0	0	0	1	0	29
PT AND/OR	08	1	0	0	0	0	0	0	0	0	0	0	1	0	29
VISIBILITY	11	0	1	0	0	0	0	0	0	0	0	1	1	0	29
LESS 2 MI	14	0	1	1	0	0	0	0	0	0	0	1	1	0	29
	17	0	1	0	0	0	0	0	0	0	0	0	0	0	29
	20	0	0	0	1	0	0	0	0	0	0	0	0	0	29
	23	0	0	0	0	0	0	0	0	0	0	0	0	0	29
ALL HRS		0	0	0	0	0	0	0	0	0	0	0	1	0	29
CEILING	02	0	0	0	0	0	0	0	0	0	0	0	0	0	29
LESS 300	05	1	0	0	0	0	0	0	0	0	0	0	0	0	29
PT AND/OR	08	1	0	0	0	0	0	0	0	0	0	0	0	0	29
VISIBILITY	11	0	0	0	0	0	0	0	0	0	0	0	0	0	29
LESS 1 MI	14	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	17	0	0	0	1	0	0								



## TOTAL PRECIPITATION INCHES

[illegible]

## COOLING DEGREE DAYS

Year	Jan.	Feb.	Mar.	Apr.	May	Jun	Jul	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1946	0	8	20	213	425	726	892	871	822	385	14	0	4
1947	0	22	120	283	417	636	840	876	437	221	176	0	4,681
1948	10	27	79	210	480	634	933	884	778	561	58	2	4,456
1949	1952	0	1	67	211	449	827	906	768	561	48	2	4,713
1950	17	10	88	171	272	632	942	821	784	389	150	0	4,190
1951	0	8	62	44	349	590	830	717	715	458	21	0	4,973
1952	0	0	0	0	0	0	0	0	0	0	0	0	0
1953	1	0	155	455	443	717	977	915	515	350	51	0	4,206
1954	0	0	88	208	383	776	977	885	687	250	11	0	4,310
1955	0	12	10	394	635	715	900	934	799	302	80	22	4,817
1956	0	8	121	261	423	817	908	882	461	410	86	4	4,764
1957	0	0	149	288	453	827	961	912	782	388	50	0	4,760
1958	0	0	0	0	0	0	0	0	0	0	0	0	0
1959	0	0	15	48	276	538	844	902	793	349	134	0	4,889
1960	0	0	0	0	0	0	0	0	0	0	0	0	0
1961	0	146	38	136	312	580	922	929	783	482	72	5	4,411
1962	0	11	14	212	344	638	924	886	482	378	6	0	4,401
1963	0	0	0	0	0	0	0	0	0	0	0	0	0
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	0	0	0	0	0	0	0
1966	0	0	0	0	0	0	0	0	0	0	0	0	0
1967	0	0	0	0	0	0	0	0	0	0	0	0	0
1968	0	0	0	0	0	0	0	0	0	0	0	0	0
1969	0	0	0	0	0	0	0	0	0	0	0	0	0
1970	0	0	0	0	0	0	0	0	0	0	0	0	0
1971	22	11	64	114	289	589	886	799	437	280	18	0	3,982
1972	0	21	206	230	425	633	929	784	605	220	1	0	4,111
1973	0	0	0	140	493	709	981	887	587	233	34	0	4,016
1974	0	0	0	146	448	790	941	884	715	371	36	0	4,213
1975	0	0	0	149	482	616	908	886	545	356	3	0	4,203
1976	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1977	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1978	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1979	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1980	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1981	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1982	0	0	0	146	488	616	908	886	545	356	3	0	4,203
1983	0	0	0	146	488	616	908	886					

## MEAN TEMPERATURE OF

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1904	58.4	58.2	60.2	74.9	78.4	80.6	79.4	78.4	77.2	75.2	74.2	73.2	77.7
1905	58.7	62.2	64.2	79.2	81.2	81.6	81.6	81.6	82.2	81.2	80.2	79.2	81.7
1906	59.7	64.2	71.6	80.2	85.6	86.6	86.6	86.6	87.2	86.2	85.2	84.2	86.2
1907	59.4	60.2	72.0	80.2	84.2	84.2	84.2	84.2	84.2	83.2	82.2	81.2	84.2
1908	59.2	59.0	65.4	80.6	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1909	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1910	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1911	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1912	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1913	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1914	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1915	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1916	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1917	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1918	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1919	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1920	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1921	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1922	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1923	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1924	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1925	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1926	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1927	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1928	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1929	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1930	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1931	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1932	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1933	59.6	60.2	68.4	80.2	85.6	85.6	85.6	85.6	86.2	85.2	84.2	83.2	85.2
1934	59.6	60.2	68.4	80.2	85.6	85							

## HEATING DEGREE DAYS

[illegible]

The Degree Day total for the month is the sum of the departures of the daily mean temperatures from the base of 65°F.

card; "p" denotes partial record, i.e. less than 10 days record missing.

**YUMA, ARIZONA**



STATION NO ON SUMMARY 03145		STATION NAME Yuma, Arizona		LATITUDE 32° 39' N		LONGITUDE 114° 36' W		STATION ELEV (FT) 214		CALL SIGN KNYL		WMO NUMBER 72280	
STATION LOCATION AND INSTRUMENTATION HISTORY													
NUMBER OF LOCATION	GEOGRAPHICAL LOCATION & NAME	TYPE OF STATION	AT THIS LOCATION		LATITUDE	LONGITUDE	ELEVATION ABOVE MEAL		OBS PER DAY				
			FROM	TO			FEET	TYPE BAROMETER					
1.	30' from the south end of operations building	MCAS	1966		32° 39' N	114° 36' W	214	Aneroid	24				

NUMBER OF LOCATION	DATE OF CHANGE	SURFACE WIND EQUIPMENT INFORMATION				REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE
		LOCATION	TYPE OF TRANSMITTER	TYPE OF RECORDER	HT ABOVE GROUND	
1.	1964	400' E of runway 17 and 400'S of runway 08	AN-UMQ-5C	RD-108C	11'	1. Barograph ML-3 2. Theodolite ML-78 3. Weather vision (GMQ-19A (V)) 4. Pilot/FCSTR Service 5. Weather radar AN/FPS-106(V) 6. Wind recorder RD-108B/UMQ-5
2.	1965	Replacement	ML/400C/ UMQ-5C	"	15'	
3.	1976	900' south of runway 3R-21L and 500' south of taxiway C	"	AN/GMQ-29A		

NWSD, Federal Building  
Asheville, N. C.